





Bibliotheca Universitatis Glasguensis

B. 1. 34.



Digitized by the Internet Archive
in 2016

<https://archive.org/details/b24924477>

A
DESCRIPTION
OF
THE PREPARATIONS
CONTAINED IN
THE MUSEUM
OF
ST. BARTHOLOMEW'S HOSPITAL.

PUBLISHED BY ORDER OF THE GOVERNORS.

PART I.
PREPARATIONS ILLUSTRATING THE NATURAL STRUCTURE OF ORGANS
IN THE HUMAN BODY.

PART II.
PREPARATIONS ILLUSTRATING THE CHANGES
PRODUCED BY DISEASE IN THE ORGANS OF THE HUMAN BODY.

PART III.
PREPARATIONS ILLUSTRATING THE FORM, STRUCTURE, AND
DISEASES OF ORGANS IN THE BODIES OF ANIMALS.

PART IV.
MISCELLANEOUS ARTICLES.

PRICE TEN SHILLINGS.

LONDON:
SOLD BY
HENRY WIX, 41, NEW BRIDGE STREET, BLACKFRIARS.
1831.

C. ADLARD, PRINTER, BARTHOLOMEW CLOSE.

PREFACE.

IN the following description, the Natural and Morbid Preparations are arranged in the order of their situation in the Museum; an arrangement originally adopted by MR. ABERNETHY, in conformity with the plan of his Anatomical and Physiological Lectures.

The description of each Specimen of Morbid Structure will be found to exhibit only the circumstances which are actually visible in it, except in the instances where the description refers to the recent state of the Specimen, when its characters of colour and texture were different from those it may now possess.

Whenever it could be safely inferred, from the appearances of the diseased parts, that certain processes were taking place in them at the time of death, these processes are stated. With the description of the Specimens of injured and diseased bone, for example, there is an explanation of the processes by which dead bone is exfoliated, and new bone formed in its place.

In the formation of the Museum, only those Morbid Specimens have been preserved which might be expected to retain their original characters in a sufficient degree to render them useful as objects of future reference. Without this explanation, the experienced pathologist would expect to find in the Collection, more numerous Specimens of some organs in the human body which are subject to frequent alterations in their structure.

It is due to the liberality of DR. CONQUEST, here to record the gift of his private Collection of Preparations, which have so greatly enriched those departments of the Museum to which they belong.

EDWARD STANLEY.

ST. BARTHOLOMEW'S HOSPITAL.

*Extract from the Minutes of a House Committee, confirmed at a General Court of Governors,
held July 23d, 1828.*

MR. ABERNETHY and MR. STANLEY having made a tender of the Preparations and all the other property in the Museum, to the Hospital, by the following Document:

“We, the undersigned, engage to give up the Preparations, and all the other property in the Museum, to the President, Treasurer, and Almoners of St. Bartholomew's Hospital, for the time being, for the use of the Medical School; and we also pledge ourselves carefully to preserve the same, to keep the Preparations in a state of good preservation, to supply new ones for those that decay, in a manner adequate to the Instruction of Students in all the facts of Anatomy usually exhibited in this manner, and to put up Specimens of every interesting occurrence relative to Disease and Accident which may be met with in the practice of the Hospital, so long as we continue to teach Anatomy and Physiology in the School of the Hospital.

“We also engage not to make any separate collection, but to add all the Preparations and Drawings which we may procure, to those in the Museum, in order to make that collection as ample and useful as possible.

“JOHN ABERNETHY.
EDWARD STANLEY.”

“ST. BARTHOLOMEW'S HOSPITAL,
May 3, 1828.”

We recommend that the care of the said Museum be confided hereafter to the appointed Teacher or Teachers of Anatomy, who, from time to time, shall communicate to the Medical Committee whatever alterations or additions may take place in the Collection: that it be considered as the duty of such Teacher or Teachers to keep the Preparations in a good state of preservation, to supply new ones for those that decay, and in a manner adequate to the Instruction of

Students in all the facts of Anatomy, and also to add new Specimens of any interesting circumstances relative to Diseases or Injuries which may occur in the practice of the Hospital.

That the Teachers are also to be required not to make any separate collection, but to add all the Preparations and Drawings to the said Museum : that the Medical Officers of the Hospital be requested carefully to inspect the Museum, and Annually report their observations to the Medical Committee, as well as to the House Committee, previously to the Midsummer General Court.

THOMAS HELPS,
AND
THOMAS HODGKINSON, Esqs. *Almoners.*

JONATHAN HARRISON,
RICHARD STRONG WELLS,
AND
JOHN ABERNETHY, Esqs.

*Extract from the Minutes of a General Court of Governors,
held July 22d, 1829.*

MR. STANLEY, on behalf of JOHN ABERNETHY, ESQ. and himself, attended and presented to this Court a Catalogue of the Preparations, &c. contained in the Museum of this Hospital, when it was resolved,

“That Five Hundred Copies of the Catalogue be printed under the direction of Mr. Stanley.”

*Extract from the Minutes of a General Court of Governors,
held July 27th, 1831.*

MR. STANLEY attended and presented to this Court a Printed Catalogue of the Preparations, &c. contained in the Museum of this Hospital, which was referred to the House Committee.

At a Meeting of the House Committee, held September 16th, it was resolved that the Catalogue should be immediately published.

CONTENTS.

PART I. NATURAL STRUCTURE.

SERIES.		PAGE.
First.	Component Parts of the Body. Elementary Structures	1
Second.	Joints.....	3
Third.	Teeth, &c.; their Structure and Formation	4
Fourth.	Brain, Spinal Cord, and Nerve	6
Fifth.	Eye, with its appendages	7
Sixth.	Ear	9
Seventh.	Skin	10
Eighth.	Nose, Mouth, Salivary Glands, Larynx, Thyroid Gland, &c.	11
Ninth.	Heart	13
Tenth.	Lung	14
Eleventh.	Æsophagus and Stomach.....	ib.
Twelfth.	Intestines	15
Thirteenth.	Liver	16
Fourteenth.	Spleen.....	17
Fifteenth.	Pancreas	ib.
Sixteenth.	Absorbent Vessels and Glands.....	18
Seventeenth.	Kidney	19
Eighteenth.	Generative Organs, Male	20
Nineteenth.	Generative Organs, Female	22

CONTENTS.

SERIES.	PAGE.
Twentieth. Generative Organs, impregnated	23
Twenty-First. Mammary Gland	28
Twenty-Second. Fœtus, its peculiarities	ib.
Twenty-Third. Malformations, Varieties in the Form and Arrangement of Parts ..	30
Osteology. Skull, National Varieties, Peculiarities of Form, &c.	37
Casts of Skulls	40

PART II. MORBID STRUCTURE.

SERIES.	PAGE.
First. Diseases of Bone	1
Second. Diseases of Joints	21
Third. Injuries of Bones and Joints.....	31
Fourth. Diseases of the Brain, its Membranes and Blood-vessels.....	44
Fifth. Diseases and Injuries of Nerve.....	49
Sixth. Diseases and Injuries of the Medulla Spinalis, and its Membranes ..	50
Seventh. Diseases of the Eye and its Appendages.....	51
Eighth. Diseases of the Skin	53
Ninth. Diseases of the Heart and Pericardium	55
Tenth. Diseases and Injuries of Arteries and Veins	59
Eleventh. Diseases of the Lung, Pleura, and Bronchial Glands.....	69
Twelfth. Diseases of the Stomach	71
Thirteenth. Diseases and Injuries of the Intestines, Peritoneum, and Mesenteric Glands	73
Fourteenth. Displacements of Intestine and Omentum, Herniæ, Intussusceptions	78
Fifteenth. Diseases and Injuries of the Liver	85
Sixteenth. Diseases of the Gall Bladder, and of the Biliary Ducts.....	88
Seventeenth. Diseases and Injuries of the Spleen.....	90
Eighteenth. Diseases and Injuries of the Nose, Mouth, Pharynx, and Œsophagus	91
Nineteenth. Diseases of the Larynx, Trachea, and Thyroid Gland	94
Twentieth. Diseases of the Kidney	96
Twenty-First. Diseases of the Scrotum	98

CONTENTS.

SERIES.	PAGE.
Twenty-Second. Diseases of the Testicle, its Coverings, and of the Spermatic Cord...	99
Twenty-Third. Diseases of the Urinary Bladder.....	103
Twenty-Fourth. Diseases of the Prostate Gland, and Vesiculæ Seminales	106
Twenty-Fifth. Diseases of the Penis and Urethra	108
Twenty-Sixth. Diseases of the Uterus, Vagina, Ovary, and Fallopian Tube	112
Twenty-Seventh. Abortions	117
Twenty-Eighth. Diseases of the Mammary Gland	118
Twenty-Ninth. Various Morbid Products, Tumors, Cysts, Hydatids, &c.....	120
Thirtieth. Morbid Alterations in the Fœtus	123
Thirty-First. Urinary Calculi.....	124
Biliary Calculi	132
Concretions from various Organs	133
Calculi from Animals	ib.
Casts of Calculi	134

PART III. COMPARATIVE ANATOMY.

SERIES.	PAGE.
First. Skeleton, Organs of Motion	1
Second. Organs of Mastication, Deglutition, &c.	5
Third. Digestive Organs, Kidneys, &c.	6
Fourth. Organs of Circulation and Respiration	8
Fifth. Absorbent Vessels	9
Sixth. Organs of Sense	10
Seventh. Organs of Generation	12
Eighth. Peculiar Secretory Organs	14
Ninth. Alterations of Structure, Morbid Products, Hydatids, Malformations, &c. in Animals.....	15

CONTENTS.

PART IV. MISCELLANEOUS ARTICLES.

	PAGE.
Natural History, Parasitic Animals, Entozoa	17
Models and Casts relating to Natural Structure.....	19
Models and Casts relating to Morbid Structure, Malformations, &c.	20

PART FIRST.

FIRST SERIES.

COMPONENT PARTS OF THE BODY. ELEMENTARY STRUCTURES.

- 1 BLOOD.—Two specimens of Fibrin, one in the form of layers, the other in the form of fibres.
- 2 ————Mass of Fibrin in the form of very thin layers and slender fibres.
- 3 ————Layer of Fibrin, exhibiting the cupped appearance of its surface.
- 4 ————Two cakes of blood, exhibiting the cupped and buffed appearances of the surface.
- 5 CELLULAR TISSUE.—Two portions, from the scrotum.
- 6 MEMBRANE.—Peritoneum; its texture displayed.
- 7 ————Peritoneum; its texture unravelled.
- 8 ————Peritoneum; its vascularity shewn.
- 9 ————Pleura; its vascularity shewn.
The two preceding specimens were prepared by Scarpa, and were presented by him to Dr. G. Burrows.
- 10 BLOOD-VESSEL.—Aorta; its three coats separated.
- 11 ————Aorta; arrangement of the fibres in the middle coat shewn.
- 12 ————Aorta; its inner coat separated.
- 13 MUSCLE.—Biceps of the Arm; its fibres minutely separated.
- 14 ————Semitendinosus; its arteries injected.

15 TENDON.—Tendo Achilles; its fibres displayed.

BONE—ITS STRUCTURE.

- 1 Section of the Os Calcis; its vessels minutely injected.
- 2 Section of the Tibia; its vessels minutely injected.
- 3 Section of the Femur; its earthy matter abstracted; the layers and fibres shewn.
- 4 Section of the Femur, shewing its cancelli.
- 5 Section of the Femur, shewing its cancelli and medullary cavity.
- 6 Sections of bones, from which the earthy matter has been abstracted.
- 7 Section of the Tibia. Vessels of the bone filled by the injection of the medullary artery.
- 8 Section of the Tibia. Vessels of the medulla filled by the injection of the arteries of the bone.
- 9 Portion of the Tibia; its walls in part removed, shewing the ramifications of the medullary artery.
- 10 Skull-cap. Its outer table removed, shewing the venous canals in the diploë.

BONE—ITS FORMATION IN THE FŒTUS.

- 1 Vertebral Column. Specks of bone in the centre of the cartilages.
- 2 Sternum, injected. Specks of bone in the centre of the cartilage.
- 3 The same, at a more advanced period.
- 4 The same. Formation of the bone almost completed.
- 5 Cylindrical Bones; their fibrous texture shewn.
- 6 Parietal Bone, injected. Arrangement of the fibres shewn.
- 7 Two Parietal Bones, shewing the arrangement of the fibres.
- 8 Parietal and Frontal Bones, shewing the arrangement of the fibres.

- | | |
|----|--|
| 9 | Femur injected, shewing the formation of the epiphyses. |
| 10 | The same. |
| 11 | The same, at a more advanced period. |
| 12 | Bones of the Pelvis; their epiphyses shewn. |
| 13 | Vertebral Column and Pelvis; epiphyses in progress of formation. |

SECOND SERIES.

JOINTS.

- | | |
|----|---|
| 1 | Portion of the Occipital Bone, with the first and second Vertebræ, shewing the two odontoid and the transverse ligaments. |
| 2 | Portions of the Radius and Ulna, with the Carpus and Metacarpus, shewing the synovial membranes, &c. |
| 3 | Hip-joint; fibrous and synovial layers of the capsule separated. |
| 4 | Joint of the Lower Jaw; its inter-articular cartilage and synovial membranes shewn. Corda tympani and its connexion with the gustatory nerve displayed. |
| 5 | Tarsus, shewing the ligaments uniting the os calcis to the naviculare and cuboides. |
| 6 | Knee-joint. Crucial ligaments displayed. |
| 7 | Knee-joint. Semilunar cartilages shewn, with the bursa beneath the ligamentum patellæ. |
| 8 | Symphysis Pubis, shewing a distinct cavity between the two bones.
From a woman who died shortly after parturition. |
| 9 | The same. |
| 10 | Portion of the Synovial Membrane of the Knee Joint, minutely injected. |

THIRD SERIES.

TEETH, &c. THEIR STRUCTURE AND FORMATION.

- | | |
|----|--|
| 1 | Portion of the Upper Jaw injected, shewing the vascularity of the gum. |
| 2 | A series of Teeth, shewing their outward form and internal cavities. |
| 3 | Teeth which have been burnt for the purpose of shewing the enamel. |
| 4 | Lower Jaw. Its outer wall removed, to shew the alveoli and fangs of the teeth, with the canals which contained their vessels and nerves. |
| 5 | Fœtal Jaws; alveoli beginning to be formed. |
| 6 | The same, at a more advanced period. |
| 7 | The same; alveoli completely formed. |
| 8 | Portion of the Fœtal Lower Jaw; its outer wall removed. Capsules of the teeth not opened. |
| 9 | Fœtal Upper Jaw; its outer wall removed. Capsules of the teeth not opened. |
| 10 | Fœtal Upper Jaw; its outer wall removed. Capsules of the teeth opened to shew the bony shells covering the pulps. |
| 11 | Fœtal Lower Jaw; its outer wall removed. Capsules of the teeth opened. Bony shells removed on one side to shew the pulps. |

- 12 Complete series of the Bony Shells of the Teeth, from the jaws of a fœtus of the age of nine months.
- 13 A series of Bony Shells of the Teeth, shewing the progress of formation of a cuspidatus.
- 14 A series of Bony Shells of the Teeth, shewing the progress of formation of a molaris.
- 15 Portion of the Upper Jaw, shewing the state of the permanent teeth when the two incisors and first molaris of the temporary set have appeared in the mouth on one side. Arteries of the teeth injected.
- 16 Portion of the Lower Jaw, shewing the same as No. 15.
- 17 Portion of the Lower Jaw, shewing the connexion of the capsule of a permanent incisor with the gum.
- 18 Upper and Lower Jaws. First set of teeth complete. Rudiments of the second set exposed in their cells. Bristles passed from the cells of the temporary teeth into the cells of the permanent set.
- 19 The same. A back view.
- 20 The same as No. 18, at a more advanced period.
- 21 A permanent Molaris, shewing the change of structure in the capsule when the deposition of enamel is completed.
- 22 Upper and Lower Jaws. Set of temporary teeth complete.
- 23 A series of Teeth, shewing the effects of mastication. With the destruction of the bone and enamel, the internal cavities are obliterated.

FOURTH SERIES.

BRAIN, SPINAL CORD, AND NERVE.

- | | |
|----|---|
| 1 | Portion of Brain injected, shewing the vascularity of the pia mater. |
| 2 | Medulla Oblongata, shewing the decussation of the anterior pyramids. |
| 3 | Section of the Pons, Medulla Oblongata, and Cerebellum, shewing the fourth ventricle, canalis medius, &c. |
| 4 | Portion of the Basis of the Cerebrum, shewing the pituitary gland, infundibulum, &c. |
| 5 | Basis of the Skull, with the Upper Cervical Vertebrae, shewing the nerves passing through the foramina; with a portion of the spinal cord, its nerves, and ganglia. |
| 6 | Portion of Nerve injected, shewing the vascularity of its neurilema. |
| 7 | The same. |
| 8 | Ischiatic Nerve. Its filaments separated. |
| 9 | Popliteal Nerve. Its filaments minutely separated. |
| 10 | Spinal Cord. Cauda equina displayed. |
| 11 | Spinal Cord; its lower extremity. |
| 12 | View of the Semilunar Ganglia, Cœliac Plexus, and Splanchnic Nerves. |
| 13 | Sections of Skulls, shewing the several processes of the dura mater. |

FIFTH SERIES.

EYE, WITH ITS APPENDAGES.

- | | |
|----|--|
| 1 | View of the Ciliary Nerves. |
| 2 | View of the Ciliary Processes, Ciliary Ligament, Crystalline Humor, &c. |
| 3 | View of the internal surface of the Choroid Membrane, of the Iris, Ciliary Processes. Sheath of the Optic Nerve, &c. |
| 4 | View of the Retina, Sheath of the Optic Nerve, Crystalline Humor, Iris, anterior chamber, &c. |
| 5 | Choroid Membrane; its vascularity shewn. |
| 6 | The same. |
| 7 | Ciliary Processes; their vascularity shewn. |
| 8 | Retina; its vessels minutely injected. |
| 9 | Sections of the Optic Nerve, shewing its passage through the sclerotica, its sheath, &c. |
| 10 | Iris; the arrangement of its vessels shewn. |
| 11 | Iris; its posterior layer, containing the pigmentum nigrum, has been removed. |
| 12 | The same. |

- | | |
|----|---|
| 13 | View of the Iris and Ciliary Ligament. Posterior layer of the iris in part separated. |
| 14 | View of the Ciliary Processes. |
| 15 | View of the Ciliary Processes and posterior surface of the Iris. |
| 16 | View of the Ciliary Processes, Crystalline, and Retina. |
| 17 | View of the Choroid Membrane, posterior surface of the Iris, and Ciliary Processes. |
| 18 | View of the posterior surface of the Iris and Ciliary Processes. |
| 19 | View of the Retina; its external surface. |
| 20 | View of the Retina; its internal surface. |
| 21 | View of the Membrana Hyaloidea and Crystalline Humor. |
| 22 | Choroid Membrane; its arteries injected with plaster of Paris.
Presented by Dr. Jacob. |
| 23 | Fibro-Cartilages of the Eyelids. |
| 24 | Lacrymal Glands. Two specimens. |
| 25 | Lacrymal Sac and Nasal Duct distended with quicksilver. |

SIXTH SERIES.

EAR.

- | | |
|----|---|
| 1 | View of the Cuticular lining of the Meatus Auditorius Externus. |
| 2 | View of the Fibro-cartilage of the external part of the ear. |
| 3 | View of all the parts of the Ear. In the fœtus. |
| 4 | View of the Muscles, with the Ossicula, in the tympanum. |
| 5 | Section of the Meatus Externus, Membrana Tympani, and Tympanum. |
| 6 | View of the Meatus Externus, Membrana Tympani, Tympanum, and Eustachian tube. |
| 7 | View of the Corda Tympani, in the tympanum. |
| 8 | Membrana Tympani, its vascularity shewn. |
| 9 | Ossicula Auditûs. From the adult. |
| 10 | Ossicula Auditûs. From the fœtus. |
| 11 | View of the Membrana Tympani and Ossicula. In the fœtus. |
| 12 | View of the Annulus Auditorius. In the fœtus. |

- 13 View of the Cochlea, Semicircular Canals, and Vestibule.
- 14 The same. Several divisions of the Labyrinth laid open.
- 15 The same.
- 16 A section of the Meatus Externus, Tympanum, Vestibule and Cochlea. Bristles are passed into the Aquæductus Fallopii, Foramen Rotundum, posterior Semicircular Canal, and the Canal for the Stapedius Muscle. The edge of the Foramen Ovale is blackened to shew the line of division between the Vestibule and the Tympanum.

SEVENTH SERIES.

SKIN.

- 1 Portion of Skin from the African. Cuticle and rete mucosum shewn.
- 2 Two portions of Skin from the African. In one portion, the Cuticle with the Rete Mucosum is separated from the Cutis. In the other portion, the Cuticle is separated from the Rete Mucosum.
- 3 Cuticle of the Hand.
- 4 Cuticle of the Foot.
- 5 Portion of the Cutis, its vascularity shewn.
- 6 Finger, minutely injected. Cuticle, with the nail detached.
- 7 Finger. Cuticle detached; vessels of the Cutis filled with quicksilver.

- | | |
|----|---|
| 8 | Portion of a Foot, shewing the vascularity of the cutis. |
| 9 | Hand of a Fœtus, shewing the vascularity of the cutis. |
| 10 | Foot of a Fœtus, shewing the vascularity of the cutis. |
| 11 | Portion of Skin from the Axilla, shewing the sebaceous glands. |
| 12 | View of the termination of the Cuticle at the anus. |
| 13 | The same. In the African. |
| 14 | Portion of Tattooed Skin. Cuticle separated. |
| 15 | Portion of Tattooed Skin. |
| 16 | Skin of the Hand, injected and detached, apparently in one piece. |
| 17 | Portion of Skin which has been tanned. |
| 18 | Cuticle, with the Nail of the Great Toe. |

EIGHTH SERIES.

NOSE, MOUTH, SALIVARY GLANDS, LARYNX, THYROID GLAND, &c.

- | | |
|---|---|
| 1 | Vertical section of the Nose, Mouth, Pharynx, Larynx, and Œsophagus. |
| 2 | Section of the Nose, shewing the maxillary sinuses, three passages of the nostrils, &c. |
| 3 | Section of the Nose, shewing the termination of the nasal duct, orifice of the Eustachian tube, &c. |

- 4 Section of the Nose, shewing the termination of the nasal duct, orifice of the antrum, &c.
- 5 Portion of the Cheek and Lips, shewing the vascularity of the mucous membrane.
- 6 Tongue, injected from one lingual artery. Only one half of the organ has received the injection.
- 7 Nerves of the Tongue shewn.
- 8 Tongue, shewing the several series of papillæ.
- 9 View of the Fauces, Pharynx, Glottis, &c.
- 10 Portion of the lower Jaw, with the Tongue shewing the terminations of the submaxillary ducts.
- 11 Parotid Gland, with its duct.
- 12 Submaxillary and Sublingual Glands, with their ducts.
- 13 Thyroid Gland, its lateral lobes, with the transverse portion.
- 14 Pharynx. Its mucous membrane is injected from one of the thyroid arteries. Only one side of the pharynx has received the injection.
- 15 Larynx. Its ligaments displayed.

NINTH SERIES.

HEART.

- | | |
|---|---|
| 1 | Heart dried, shewing the ramifications of the coronary arteries and veins. |
| 2 | Sections of the Auricles and Ventricles. Mitral valve raised. |
| 3 | Mitral Valve and Cordæ Tendineæ. |
| 4 | Portion of the Aorta. Semilunar valves raised. |
| 5 | Portions of the Aorta and Pulmonary Artery. Semilunar valves of the aorta raised. |
| 6 | Portions of Adult Hearts, shewing the foramen ovale widely open. Two specimens. |
| 7 | Section of the Adult Heart. Foramen ovale widely open. |
| 8 | Casts of the Cavities of the Heart, in wax. |

TENTH SERIES.

LUNG.

- | | |
|---|---|
| 1 | Heart and Lungs corroded. Injection of the pulmonary vessels and air tubes. |
| 2 | The same. |
| 3 | Portion of Lung dried, shewing the air cells. |
| 4 | Portion of Lung, shewing the vascularity of its substance. |
| 5 | Lung corroded. Injection of the pulmonary artery and veins. |
-

ELEVENTH SERIES.

ÆSOPHAGUS AND STOMACH.

- | | |
|---|--|
| 1 | Portion of the Æsophagus and Stomach, shewing the termination of the cuticular lining of the former. |
| 2 | Portion of Æsophagus, in which the longitudinal and circular fibres are shewn. |
| 3 | Stomach contracted, shewing the folds of the mucous membrane. |

- 4 Stomach of a Child. Beneath the mucous membrane there are numerous small rounded bodies, supposed to be glands.
- 5 Section of the Pylorus.
- 6 View of the Pylorus.
- 7 Stomach of a Child, shewing the vascularity of the mucous membrane.
- 8 View of the Pylorus.
- 9 Stomach, contracted.
- 10 Stomach, shewing a circular contraction in its centre.

TWELFTH SERIES.

INTESTINES.

- 1 Small Intestine, shewing the two layers of muscular fibres.
- 2 Small Intestine, shewing the vascularity of the mucous membrane.
- 3 Jejunum, shewing the valvulæ conniventes.
- 4 The same. Villi filled with chyle.
- 5 The same.
- 6 Portions of the Jejunum and Ilium, shewing their difference with respect to the valvulæ conniventes.

- | | |
|----|--|
| 7 | Portions of small Intestine, the veins of which are filled by a white fluid, supposed to be chyle. |
| 8 | The same. |
| 9 | Portion of small Intestine in which the glands are unusually distinct. |
| 10 | View of the Glands in the Ilium, around the orifice of the ilioecæal valve. |
| 11 | View of the Iliocæcal valve. |
| 12 | The same. |
| 13 | The same, dried. |
| 14 | Portions of small Intestine, shewing the cellular tissue between its coats. |
| 15 | Portion of small Intestine, shewing the arrangement of its blood vessels. |
| 16 | View of the Biliary and Pancreatic ducts, their terminations in the duodenum. |

THIRTEENTH SERIES.

LIVER.

- | | |
|---|--|
| 1 | Liver corroded. Injection of the vena portæ, hepatic artery, hepatic veins, biliary tubes. |
| 2 | Portion of the Liver injected, shewing the stellated terminations of the vena portæ. |
| 3 | The same. |

FOURTEENTH SERIES.

SPLEEN.

- | | |
|---|--|
| 1 | Spleens corroded. Injections of the splenic artery and vein. |
| 2 | Spleen, the vessels of which have been unravelled. |
-

FIFTEENTH SERIES.

PANCREAS.

- | | |
|---|---|
| 1 | Pancreas. View of its form, &c. |
| 2 | Pancreas, dried. Its duct injected. |
| 3 | The same. Accessary portion of the gland with its duct shewn. |

SIXTEENTH SERIES.

ABSORBENT VESSELS AND GLANDS.

- | | |
|----|---|
| 1 | Absorbent Vessels, filled with quicksilver. |
| 2 | The same. |
| 3 | Absorbent Vessels and Glands, filled with quicksilver. |
| 4 | The same. |
| 5 | Absorbent Vessels and Gland, filled with quicksilver. |
| 6 | Absorbent Vessels and Glands, filled with quicksilver. |
| 7 | Portion of small Intestine, exhibiting the injection of its absorbent vessels and of the mesenteric glands, with quicksilver. |
| 8 | The same. |
| 9 | Absorbents of the Spleen, filled with quicksilver. |
| 10 | Absorbents of the Gall Bladder, filled with quicksilver. |
| 11 | Absorbents of the Liver, filled with quicksilver. |
| 12 | Portion of small Intestine, exhibiting its absorbents, filled with chyle. |
| 13 | The same. |

SEVENTEENTH SERIES.

KIDNEY.

- 1 Kidney corroded. Renal artery and vein injected.
- 2 Kidney corroded. Injection of the Renal artery, Vein, and Ureter.
- 3 The same.
- 4 The same.
- 5 Section of a Kidney, exhibiting the minute injection of its cortical part.
- 6 The same.
- 7 The same. The injection has passed into some of the uriniferous tubes within the papillæ.
- 8 Section of a Kidney, exhibiting the minute injection of its cortical and uriniferous parts with plaster of Paris.
- 9 Fœtal Kidney. Its cortical part minutely injected. The capsule separated.
- 10 Cast in wax, of the Pelvis and infundibula of the Kidney.
- 11 The same.

EIGHTEENTH SERIES.

GENERATIVE ORGANS, MALE.

- | | |
|----|---|
| 1 | View of the form and extent of the Tunica Vaginalis Testis. |
| 2 | View of the Cellular Sheath of the Spermatic Cord. |
| 3 | Spermatic Cord and Testicle. The spermatic veins filled with wax. The Vas Deferens, Epididymis, and some of the Tubuli Seminiferi, filled with quicksilver. |
| 4 | The same. |
| 5 | Spermatic Cord and Testicle. The Spermatic veins and the Epididymis filled with quicksilver. |
| 6 | Testicle, exhibiting the injection of the Epididymis, and of some of the Tubuli Seminiferi, with quicksilver. |
| 7 | Testicle, Tubuli Seminiferi unravelled. |
| 8 | Spermatic Cord, with the Tunica Vaginalis Testis. Spermatic veins filled with wax. |
| 9 | Testicle, &c., shewing the distribution of the spermatic artery. |
| 10 | The same. Two specimens. |
| 11 | Epididymis, filled with quicksilver, and unravelled. |
| 12 | The same. |
| 13 | Vesiculæ Seminales, filled with quicksilver, one vesicula unravelled. |

- 14 Sections of the Vesiculæ Seminales, Vasa Deferentia and Seminal ducts.
- 15 The same.
- 16 View of the Bladder, Penis, Testicles, Spermatic Cords, &c. (dried.)
- 17 View of the Bladder and Penis. Veins of the bladder and arteries of the penis injected, (dried.)
- 18 View of the Bladder, Penis, Vesiculæ Seminales, &c. (dried.)
- 19 Vertical section of the Prostate Gland, and Urethra.
- 20 View of the middle lobe of the Prostate Gland.
- 21 Prostate Gland. Two specimens, shewing its size at the ages of four and ten years.
- 22 View of the Triangular Ligament of the Urethra.
- 23 The same, (dried.)
- 24 View of the Triangular Ligament, with the bulb, and the membranous portion of the urethra.
- 25 Penis; injection of the corpus cavernosum, and corpus spongiosum.
Presented by Thomas Wormald, esq.
- 26 The same.
- 27 Portion of the Glans Penis, and Corpus Spongiosum, injected and corroded.
Prepared by Thomas Wormald, esq.
- 28 Sections of the Corpus Cavernosum, (dried.)
- 29 Corpus Cavernosum laid open on one side, its spongy tissue removed.
- 30 View of the Septum in the Corpus Cavernosum, (septum pectiniforme.)
- 31 Section of the Glans Penis.
- 32 Section of the Corpus Cavernosum and Corpus Spongiosum.
- 33 Corpus Spongiosum injected, shewing the vascularity of the membrane of the urethra.

- 34 Urethra laid open in its whole extent. Bristles passed into the lacunæ and seminal ducts. Fifty three lacunæ are displayed.
- 35 Cast, in wax, of the Urethra.
- 36 Cast, in wax, of the Vesicula Seminalis and Vas Deferens.

NINETEENTH SERIES.

GENERATIVE ORGANS, FEMALE.

- 1 View of the external Organs, with the body and crura of the Clitoris. Hymen perfect.
- 2 Uterus and its appendages, with the Vagina.
- 3 Ovaries and Fallopian Tubes. Fimbriated extremities of the latter displayed.
- 4 Fallopian Tube, injected.
- 5 Uterus, injected.
From a female, who died at the period of menstruation.
- 6 Ovaries, in which the Vesicles (Ovula Graafiana) are unusually distinct.
- 7 Uterus, with its appendages, from a child ten years of age, shewing the large size of the ovaries with the cells in the interior of one of them.
- 8 Uterus, with its appendages, from a child thirteen years of age, shewing the cells in one of the ovaries filled by a gelatinous substance.
- 9 Ovary, injected.

- 10 View of the Bladder, Uterus, Vagina, and Rectum, from a child about six years of age.
Presented by Dr. Conquest.
- 11 Uterus, with its appendages.
Presented by Dr. Conquest.
- 12 Uterus, with its appendages of unusually small size. From a female seventeen years of age,
who had menstruated only once.
Presented by R. Partridge, esq.
-

TWENTIETH SERIES.

GENERATIVE ORGANS, IMPREGNATED.

- 1 Ovum, at about the fifth week.
Presented by Dr. Conquest.
- 2 Ovum, at the same period.
- 3 Ovum, at about the seventh week.
- 4 Ovum, at the same period.
Presented by Dr. Conquest.
- 5 Ovum, at about the eighth week.
- 6 Ovum, at about the ninth week.
Presented by Dr. Conquest.
- 7 Ovum, at the same period.

- 8 Ovum, at about the ninth week.
- 9 Ovum, at about the eleventh week.
Presented by Dr. Conquest.
- 10 Ovum, at about the fourteenth week.
- 11 Ovum, at about the fourth month.
- 12 The same.
- 13 Ovum, at about the fifth month.
- 14 Uterus, with the foetus and membranes at about the fifth month.
- 15 Foetus, with the amnios and chorion at about the sixth month.
- 16 Uterus, with the foetus, at about the seventh month. Foetus in an unusual position, with its head upwards.
- 17 Uterus, with the foetus, at about the eighth month.
- 18 Uterus, with the foetus, at the ninth month.
Prepared by Dr. Conquest.
- 19 Foetus, at the ninth month, of unusually large size. It was born in fifteen minutes from the commencement of parturition, and it lived one hour afterwards.
Presented by Dr. Conquest.
- 20 Section of the Uterus and Membranes of the Ovum, shewing the two layers of the decidua.
- 21 The same.
- 22 Foetus and Membranes. The umbilical cord is twisted four times around the neck of the foetus.
Presented by Dr. Conquest.
- 23 Foetus and Membranes. The umbilical cord is twisted three times around the neck of the foetus.
Presented by Dr. Conquest.

- 24 Uterus, with the Fœtus. The umbilical cord is twisted once around the neck of the fœtus.
Presented by Dr. Conquest.
- 25 Uterus, with the Fœtus. The umbilical cord is twisted once around the arm.
Presented by Dr. Conquest.
- 26 Portion of the umbilical cord. Its contiguous surfaces adhere firmly together.
Presented by Dr. Conquest.
- 27 Portion of the Chorion, injected.
Presented by Dr. Conquest.
- 28 Portion of the Amnios, injected.
Presented by Dr. Conquest.
- 29 Fœtus, at about the seventh week.
Presented by Dr. Conquest.
- 30 Fœtus, at about the twelfth week.
Presented by Dr. Conquest.
- 31 Fœtus, at about the fourteenth week.
Presented by Dr. Conquest.
- 32 Fœtus, at about the eighteenth week.
Presented by Dr. Conquest.
- 33 Fœtus, at about the fifth month.
- 34 Placenta, with the umbilical cord, shewing the lobulated form of the surface of the placenta which was attached to the uterus.
Presented by Dr. Conquest.
- 35 Placenta, with the umbilical cord. The fœtal part of the placenta is injected.
- 36 Placenta. Its fœtal part is unravelled.
- 37 The same.
Presented by Dr. Conquest.

- 38 Placenta. Its fœtal part is injected and unravelled.
- 39 Placenta. The umbilical vessels injected and corroded.
- 40 Placenta, with the membranes. Umbilical vessels injected.
Presented by Dr. Conquest.
- 41 The same.
Presented by Dr. Conquest.
- 42 Four Placentæ. Umbilical vessels injected. In two of these specimens, the umbilical cord enters the placenta at its edge.
- 43 Two Placentæ. Umbilical vessels injected. In one of these specimens, the umbilical cord enters the placenta at its edge.
Presented by Dr. Conquest.
- 44 Placenta, with an umbilical cord three feet in length.
Presented by Dr. Conquest.
- 45 Umbilical cord, in which there is only one artery.
Presented by Dr. Conquest.
- 46 Portion of an umbilical cord which was found twisted into a knot.
Presented by Dr. Conquest.
- 47 Impregnated Uterus. Its arteries displayed.
- 48 Uterus of a woman who died shortly after delivery. Its arteries and veins injected.
- 49 The same.
- 50 Portion of an impregnated uterus, shewing the arrangement of its fibres.
Presented by Dr. Conquest.
- 51 Ovary, in which there is a Corpus Luteum.
- 52 The same.
- 53 The same, injected.

- 54 Uterus injected, from a woman who died a few hours after parturition at the full period.
Presented by Dr. Conquest.
- 55 Uterus, from a woman who died nearly a fortnight after delivery at the full period.
Presented by Dr. Conquest.
- 56 Uterus, exhibiting the state of the uterine and spermatic veins, six weeks after parturition.
- 57 Uterus, with its appendages, which was supposed to have been impregnated a short time before death. A membrana decidua lines the uterus. A bristle is passed through an aperture in the ovary, which led to a cell in its interior, from which it is supposed the ovum had escaped.
- 58 Placentæ and membranes, in a case of twins.
- 59 The same. A single chorion envelopes the double amnios.
- 60 Ovum, in which there is but one set of membranes enveloping two fœtuses.
Presented by Dr. Conquest.
- 61 Extra-uterine conception. The ovum was lodged in the dilated Fallopian tube. The tube ruptured at the seventh week, and the woman, in consequence, died of hæmorrhage. A membrana decidua lines the uterus.
Presented by Dr. Conquest.
- 62 Extra-uterine conception, at a more advanced period, exhibiting the same appearances as the preceding. A bristle is passed from the uterus into the Fallopian tube.
- 63 Extra-uterine conception, at a more advanced period. The ovum was lodged in the dilated Fallopian Tube. A membrana decidua lines the uterus.
- 64 Extra-uterine conception. The ovum is retained in the ovary. A membrana decidua lines the uterus. The cervix uteri is filled by a gelatinous substance.

TWENTY-FIRST SERIES.

MAMMARY GLAND.

- | | |
|---|--|
| 1 | Mammary Gland, from a woman, who died shortly after parturition. Bristles are passed into the lactiferous ducts. |
|---|--|
-

TWENTY-SECOND SERIES.

FŒTUS, ITS PECULIARITIES.

- | | |
|---|---|
| 1 | View of the Thoracic and Abdominal Viscera. |
| 2 | View of the Heart, Lungs, Thymus &c. |
| 3 | Thymus. |
| 4 | Thymus, its upper part divided into two processes.
Presented by Dr. Conquest. |
| 5 | Section of the Heart, shewing the equal thickness of the walls of the ventricles. |
| 6 | Heart, exhibiting the Foramen Ovale and its valve. |
| 7 | Heart, exhibiting the valve of the Foramen Ovale at a more advanced period. |

- 8 Heart and its vessels injected, shewing the *Ductus Arteriosus*.
- 9 Heart and principal vessels of the body injected, shewing the peculiarities of the foetal circulation.
- 10 The same.
- 11 View of the *Membrana Pupillaris* in its complete state. Its vessels are minutely injected.
- 12 View of the *Membrana Pupillaris* in progress of absorption.
- 13 The same, at a more advanced period.
- 14 View of the Lobulated form of the *Kidneys*, with the *Renal Capsules*.
- 15 Portion of small intestine, shewing that there are no *valvulae conniventes*.
- 16 View of the *Cæcum*, with the *Appendix Vermiformis*.
- 17 View of the *Testes* in the abdomen, with the *Gubernacula*. A bristle is passed beneath the *gubernaculum* on one side.
- 18 View of the *Testis*, on one side in the abdomen, and on the other, in the *scrotum*. A bristle is passed through the *peritoneal pouch* extending on the one side from the abdomen into the *scrotum*.
- 19 View of the natural situation of the *Testes* in the abdomen, immediately below the *kidneys*.
- 20 View of the *Testes*, situated in the abdomen, immediately above the *abdominal rings*.
- 21 View of the *Testes* in the *scrotum*. Bristles are passed through the *peritoneal pouches*, extending from the abdomen into the *scrotum*.
- 22 View of the natural situation and *peritoneal connexions* of the *Testes* in the abdomen.
- 23 View of the *Testis*, on one side in the abdomen, and on the other, in the *scrotum*.
- 24 View of the *External Organs of Generation*, shewing the early development of the *Clitoris*.

Presented by Dr. Conquest.

TWENTY-THIRD SERIES.

MALFORMATIONS. VARIETIES IN THE FORM AND ARRANGEMENT OF PARTS.

- 1 Dura Mater. Falx cerebri imperfect, its anterior half deficient.
- 2 The same.
- 3 Spina Bifida, combined with Hydrocephalus. The spinous processes and arches of the vertebræ are wanting nearly in the whole extent of the spine. Part of the occipital bone is deficient.
- 4 Spina Bifida. The spinous processes and arches of the vertebræ are wanting nearly in the whole extent of the spine.
- 5 Spina Bifida. A sac, consisting of a portion of the Theca Vertebralis, is protruded through a space in the back part of the sacrum. Several of the sacral nerves adhere firmly to the inside of the sac.
- 6 Spina Bifida, exhibiting the same appearances as the preceding.
- 7 Spina Bifida. The arches of the lower lumbar vertebræ, and the posterior part of the sacrum are deficient. The sac formed by the protruded theca vertebralis is of large size. Two nerves adhere to the inside of the sac.
- 8 Spina Bifida. The posterior part of the sacrum is deficient. Many nerves terminate upon the internal surface of the sac, formed by the protruded theca vertebralis.

- 9 Deficiency of a portion of the occipital bone. The dura mater and a portion of brain are continued through the aperture.

Case described by Mr. Earle, *Medico-Chirurgical Transactions*, vol. vii. p. 427.

- 10 Head of a Fœtus, in which there are two lower jaws, two tongues, with a fissure in the palate and uvula.

- 11 Head and limbs of a Fœtus, in which there is a hare lip, and fissure in the palate, with five fingers and a thumb on each hand, and seven toes on each foot.

- 12 Acephalous Fœtus, (male,) shewing the deficiency of the superior part of the skull.

- 13 Male Fœtus, in which the eyes are united and situated in the middle of the forehead. There is also a deficiency of the external part of the nose.

- 14 Fœtus, in which there is a single head, with two female bodies, and the limbs complete.

- 15 Acephalous Fœtus, (female,) shewing the entire absence of the brain with a perfect spinal cord. The cerebral nerves commence at the holes in the skull. Bristles are passed beneath the optic and spinal accessory nerves.

- 16 Head of an acephalous Fœtus, shewing the deficiency of the superior part of the cranium.

- 17 Upper limbs of a Fœtus, in which there is distortion of the hands. In the delivery of the fœtus, the distorted hands were mistaken for the feet.

Presented by Dr. Conquest.

- 18 Skeleton of an acephalous Fœtus, (female). There is a deficiency of the superior part of the cranium, and of the arches of the vertebræ in the whole extent of the spine.

- 19 Skeleton of an acephalous Fœtus, (female). There is a deficiency of the posterior part of the cranium, of the arches of the vertebræ and of the posterior part of the sacrum.

- 20 Skeleton of a Fœtus (male). The two thigh bones, and the two tibiæ are inseparably united. The feet are entirely wanting. The arches of the lower lumbar vertebræ are wanting.

Presented by William Hughes, esq.

- 21 Skeleton of a Fœtus, in which one lower limb, with the corresponding side of the pelvis, is

entirely wanting. Small portions of bone, apparently rudiments of a femur and tibia, are connected with the ilium of the opposite side.

Presented by Thomas Stocker, esq.

- 22 Skeleton of a Fœtus born with hydrocephalus, which escaped from a ruptured uterus. The head measures twenty inches in circumference, and seventeen inches from the nose to the foramen magnum. The uterus is preserved. Diseases of the Uterus, &c. No 38.

Presented by Dr. Conquest.

- 23 Head of a Fœtus born with hydrocephalus.

Presented by Dr. Conquest.

- 24 Masses of fat, with a portion of bone resembling the upper jaw, and several teeth, which were found in the anterior mediastinum of an adult female.

Case described by Dr. Gordon. *Medico-chirurgical Transactions* Vol. xiii. p. 12.

Presented by W. Kingdon, esq.

- 25 Kidney, in which the ureter is continued from the infundibula without the formation of a pelvis.

- 26 Kidney, from which two ureters are continued.

- 27 Kidneys, united at their lower ends.

- 28 Kidneys, united at their lower ends.

- 29 Kidneys, from an adult, consisting of one large mass, and of many smaller portions continued from it, and which extended across the abdomen.

- 30 Rectum of an infant, a portion of which, to the extent of an inch, is deficient just above the anus. The intestine is dilated into a large sac by the meconium which distended it. A bristle is passed through an aperture in the intestine which was made by a trochar in an attempt to obtain a passage for the evacuation of the meconium.

- 31 Heart of a child, about ten years of age. The right ventricle consists of solid muscular substance, except at its upper part, where there is a small cavity. This cavity has no direct communication with the pulmonary artery. The pulmonary artery is of its natural size but completely closed at its origin. The semilunar valves of the pulmonary artery are not formed. The ductus arteriosus was pervious. The auricles are perfect. The tricuspid valve is imperfect, it consists of a very narrow slip of membrane. The mitral valve is perfect. The foramen ovale is widely open.

The left ventricle and aorta are perfect. The aorta is large between its origin and the ductus arteriosus.

- 32 Heart of a child about three years of age. The auricles are separated only by a thin round cord. The septum between the ventricles is completely wanting. The whole interior of the heart is consequently a single cavity. The sides of the ventricles are of equal thickness. The pulmonary artery is contracted at its origin, and it has no valves. The mitral valve is wanting. The ductus arteriosus is open.
- 33 Heart of an individual about sixteen years of age. Besides the right and left ventricles, a third smaller ventricle is seen on the anterior side of the heart. This third ventricle communicates by two openings with the right ventricle; into one of these openings a piece of bougie is introduced. The pulmonary artery arises from the third ventricle. The origin of the aorta is placed directly over the septum dividing the right from the left ventricle, so that its orifice communicates with both cavities. The sides and the fleshy columns in the right ventricle are thicker than in the left. The ductus arteriosus is closed.
- 34 Heart of an individual about twenty-eight years of age. The origin of the aorta is placed directly over the septum ventriculorum, so as to communicate equally with both ventricles. The pulmonary artery communicates at its origin with the right ventricle by an opening that will just admit the passage of two portions of straw. Neither the ductus arteriosus nor foramen ovale are left, so that it could not be ascertained whether they were pervious.
- 35 Heart of an Adult. The aorta arises directly over the septum ventriculorum so as to communicate equally with both ventricles. The origin of the pulmonary artery is directly over the left ventricle. The foramen ovale is pervious. The ductus arteriosus is closed.
- 36 Heart of a child about ten years of age. The two auricles form but one cavity, which communicates only with the left ventricle. The right ventricle forms an exceedingly small cavity communicating with the left ventricle through an aperture in the septum. The left ventricle has a very large cavity and thick sides. It could not be ascertained whether the ductus arteriosus was pervious.
- 37 Portion of an Aorta, in which there are only two semilunar valves.
- 38 Portion of small intestine, from which a diverticulum is continued.
- 39 Skull of an individual twenty-two years of age, who was born an idiot. The texture of the bones is natural. The cranium is remarkably small. The face is of its usual dimensions.

- 40 Brain removed from the preceding cranium. The convolutions of the cerebrum but few in number, are of their natural size.
- 41 Model in wax of the preceding brain.
- 42 Cast in plaster of the head and face of the idiot from whom the preceding preparations were taken.
- 43 Spine of an Adult, in which there are thirteen ribs on each side.
- 44 Thigh bones and ossa innominata from the same individual. There was no ligamentum teres in either hip-joint. The capsules were unusually thick. In every other respect, the joints were perfectly natural.
- 45 Stomach and Intestines of a Boy, whose body measured four feet three inches. The small intestine is about two feet in length, the large intestines upwards of four feet.
- Case described by Mr. Abernethy. *Philosophical Transactions*, vol. lxxxiii. p. 64.

VARIETIES IN THE ARRANGEMENT OF ARTERIES.

- 1 Two branches arising from the arch of the aorta, one of these divides into the right subclavian and two carotid arteries, the other is the left subclavian artery.
- 2 Four branches arising from the arch of the aorta, the two subclavians and two carotids. The right subclavian, arising from the termination of the arch, passed across the neck, behind the œsophagus.
- 3 Left Vertebral Artery, arising from the arch of the aorta.
- 4 Five branches arising from the arch of the aorta. Two subclavians, two carotids, and the left vertebral artery.
- 5 Left Vertebral Artery arising from the arch of the aorta, and ascending behind the carotid to the fifth cervical vertebra before it enters the holes in the transverse processes.
- 6 A large artery ascending from the arteria innominata to the thyroid gland.
- 7 Arteria Innominata ascending to some distance above the sternum before it divides into the

carotid and subclavian arteries. A large artery proceeds from the arteria innominata to the thyroid gland.

- 8 Arch of the Aorta. Same arrangement of the branches as No. 1.
- 9 A large branch of the inferior thyroid artery on the right side passing directly across the front of the carotid to the thyroid gland.
- 10 Four branches arising from the arch of the aorta; right subclavian arising from the termination of the arch, passes across the neck behind the œsophagus. Right vertebral arising from the right carotid, enters the hole of the fourth cervical vertebra.
- 11 Arch of the Aorta. Same arrangement of branches as No. 2.
- 12 Arch of the Aorta. Same arrangement of branches as No. 2.
- 13 Two branches arising from the arch of the aorta.
- 14 Left Vertebral Artery arising from the arch of the aorta, and entering the hole in the transverse process of the fourth cervical vertebra.
- 15 External carotid Artery dividing into its several branches immediately after its origin.
- 16 Carotid Artery. Of the usual branches of the external carotid, two arise from the common carotid, and one from the internal carotid.
- 17 Aorta. Four renal arteries on one side, three on the other.
- 18 Aorta. Five renal arteries on one side.
- 19 Aorta. Common iliac arteries dividing immediately after their origins.
- 20 Vena Cava Inferior ascending on the left side of the aorta to the diaphragm, then passing over the aorta to the liver.
- 21 Two Common iliac Veins ascending to the first lumbar vertebra, then uniting to form the vena cava.

- 22 Brachial Artery. A large branch arising from the upper part of the brachial is continued into the ulnar artery.
- 23 Brachial Artery. Radial artery arising from the commencement of the brachial. A large branch arising from the brachial is continued into the radial artery, beneath the tendon of the biceps.
- 24 Femoral Artery. A large artery arising from the femoral is continued into the popliteal artery.
- 25 Arm. Interosseous artery arising from the commencement of the brachial.
- 26 Arm. Radial artery arising from the commencement of the brachial.
- 27 Arm. Radial artery arising from the axillary. An artery arising from the radial at the elbow, proceeds down the middle of the forearm to the hand.
- 28 Arm. Ulnar artery arising from the brachial in the middle of the arm and passing superficially over the muscles of the ulnar edge of the forearm.
- 29 Arm. Radial artery dividing immediately after its origin into two branches of equal size.
- 30 Arm. Radial artery dividing in the middle of the forearm into two branches of equal size.
- 31 Arm. Radial artery arising from the brachial in the middle of the arm.
- 32 Arm. Radial artery arising from the brachial in the middle of the arm.
- 33 Forearm. Radial artery turning backward to the posterior part of the radius, and passing over the extensor tendons of the thumb.
- 34 Forearm. Large artery proceeding from the commencement of the ulnar down the middle of the forearm to the hand.
- 35 Forearm. Anterior interosseous artery passing across the front of the radius and continued into the radial artery.
- 36 Elbow. Ulnar artery arising from the brachial just above the joint, and passing superficially over the muscles of the forearm.

- 37 Portion of the Pelvis. Obturator and epigastric arteries arising by a common trunk. Obturator artery descending upon the internal surface of Gimbernat's ligament to the obturator hole.
- 38 Leg. Anterior tibial artery terminating in the middle of the leg. Peroneal artery continued through the interosseous ligament to the upper surface of the tarsus.

OSTEOLOGY.

SKULL. NATIONAL VARIETIES. PECULIARITIES OF FORM, &c.

- 1 Skull, European. Peculiar form of the cranium.
- 2 Skull, European. Peculiar form of the cranium.
- 3 Skull. Peculiar form of the cranium and face.
- 4 Skull, European. An inequality of size and form in the lateral parts of the cranium and face.
- 5 Skull, European, (Bellingham.)
- 6 Skull, European, (female.)
- 7 Skull, European.
- 8 Skull, European. Two ossa triquetra in the squamous suture.
Presented by Dr. Conquest.
- 9 Skull, supposed to be that of a Norman, who was killed at the battle of Hastings.
Presented by Dr. Conquest.
- 10 Skull of an African. Characters very strongly marked.
- 11 Skull of an African. Characters very strongly marked.

- | | |
|----|---|
| 12 | Skull of an African. |
| 13 | Skull of an African. |
| 14 | Skull of an African. |
| 15 | Skull of an African. |
| 16 | Skull of an African. |
| 17 | Skull. From Antigua.
Presented by Dr. Conquest. |
| 18 | Skull of a German. |
| 19 | Skull of a German. |
| 20 | Skull of a Chinese. |
| 21 | Skull of a Turk. |
| 22 | Skull of a native of New Holland.
Presented by G. Langstaff, esq. |
| 23 | Adult skull, French. Frontal suture perfect. |
| 24 | Skull, in which the alveolar processes have been completely absorbed. Frontal suture perfect. |
| 25 | Adult Skull. Frontal suture perfect. |
| 26 | Adult Skull. Frontal suture perfect. Frontal sinuses very large. |
| 27 | Adult Skull. Frontal sinuses wanting. Frontal suture perfect. |
| 28 | Adult Skull. Six ossa triquetra in the lambdoid suture. |
| 29 | Adult Skull. Eleven ossa triquetra in the lambdoid suture. |
| 30 | Adult Skull. Os triquetrum in the lambdoid suture. |

- 31 Adult Skull. Occipital bone consisting of three pieces. Os triquetrum in the coronal suture.
- 32 Adult Skull. One half of the coronal suture wanting.
- 33 Basis of the Skull. Large os triquetrum in the lambdoid suture.
- 34 Skull-cap. Large os triquetrum in the lambdoid suture.
- 35 Skull of a Young Subject. The bones are separated to a certain extent and the form of the cranium is otherwise altered in consequence of the accumulation of fluid within the ventricles of the brain.
- 36 Adult Skull, marked by Dr. Spurzheim for the explanation of his system of Phrenology.
Presented to Mr. Abernethy by Dr. Spurzheim.
- 37 Adult Skull. Bones separated and readjusted so as to shew their natural situations and connexions.
- 38 Skeleton of a Fœtus, (male,) at the full period.
- 39 Skeleton of a Fœtus, at the full period.
Presented by Dr. Conquest.
- 40 Skeleton of a Fœtus, at about the seventh month.
Presented by Dr. Conquest.
- 41 Skeleton of a Fœtus, at about the sixth month.
Presented by Dr. Conquest.
- 42 Skeleton of a Fœtus, at about the fifth month.
Presented by Dr. Conquest.
- 43 Skeleton of a Fœtus, at about the third month.
Presented by Dr. Conquest.

CASTS OF SKULLS.

- 1 Cast of the Head of James Cardinal, aged twenty-seven, who was affected with hydrocephalus from his infancy.
Presented by Thomas Wormald, esq.
- 2 Cast of the Skull of Thurtell.
- 3 Cast of the Skull of Raphael.
Presented by Dr. Conquest.
- 4 Cast of the Skull of a Carib.
- 5 Cast of the Cranium of a boy, aged ten years, exhibiting a remarkable peculiarity of form. The intellectual faculties were perfect.

PART SECOND.



FIRST SERIES.

DISEASES OF BONE.

- 1 Abscess in the medulla of the Tibia. The situation of the abscess is pointed out by the deficiency of medulla in that part of the bone. The periosteum is not so strongly united to the bone as in the natural state; it has been partially reflected, in order to shew its vascularity and softened texture opposite to, and for some way above and below the situation of the abscess. The perfect injection of the vessels of the bone shews that it retained its vitality.
- 2 Superficial Necrosis of the Tibia, exhibiting the process of Exfoliation. The dead and exfoliating piece of bone is separated from the living bone in the upper half of its extent, and the space which has been formed by the absorbents between the dead and the living bone is occupied by soft vascular matter. The granulations arising from the parts around the dead bone are large and spongy.
- 3 Necrosis of the Tibia. In this instance the whole body of the tibia has died, new bone has in consequence formed around it, and the old bone is in part removed. Soft vascular matter intervenes between the living and dead bone. The absorption of the dead bone has taken place in those situations where it is in contact with the soft and vascular matter. The surface of the dead bone, in progress of absorption, is irregularly excavated. The walls of the new bone are very thick, its external surface is irregular, and it is of a very dense texture.
- 4 Necrosis of the Tibia. In this instance the head and a part of the body of the tibia have died, and are replaced by new bone. The small portion at the bottom of the bottle is all that remains of the old bone; it was lodged in the cavity within the new bone. The new bone has been sawed longitudinally, and the anterior part turned downwards. The periosteum has been partially reflected, in order to shew the rough external surface of the new bone.
- 5 Necrosis of the Femur. The whole body of the femur has died, and is entirely separated from the articular ends. The dead bone is contained in a sort of cavity formed in part by the new bony cylinder, which is not yet complete, and in part by the surrounding soft matter.

The formation of the new bone has not extended the whole length of the Femur, a considerable space remains at the lower part of the thigh, where the new bone has not yet formed; the new bone is consequently connected with the condyles only by soft matter. The internal surface of the new bone exhibits great vascularity; the external surface is rough and irregular, and not provided with distinct periosteum; it has a condensed cellular tissue attached to it, a portion of which has been turned back at the upper part. The surface at the lower end of the femur from which the dead bone has been separated, is covered with granulations. The cartilage is almost completely removed from the lower end of the femur, and its absorption has taken place in a peculiar manner.

Amputation of the thigh was, in this instance, performed in such a situation, that the saw passed through the trochanter major.

Case of James Macdonnel, in a paper by Mr. Lawrence, on tying arteries. *Medico-Chirurgical Transactions*, vol. vi. p. 174.

- 6 Necrosis of the Tibia. The body of the bone has died. The formation of the new and absorption of the old bone are taking place simultaneously. What remains of the old bone is situated in the middle of the new, and may be distinguished by its peculiar whiteness. Between the new and the old bone is a considerable quantity of soft vascular matter.

- 7 Tibia of a Dog, exhibiting a portion of the walls dead, and in the progress of exfoliation. The dead bone is distinguishable from the living by its whiter colour; its separation is almost complete. Between the dead and the living bone a space intervenes, which is filled by soft and vascular substance. New bony matter is heaped upon the living bone, around the dead bone. The periosteum has been in part detached from the tibia, opposite the exfoliating portion, in order to shew that the new osseous matter is distinctly beneath this membrane.

The changes just described succeeded to the cauterization of the external surface of the bone. Experiment by Mr. Stanley.

- 8 Tibia of a Dog from which a portion of the walls has entirely exfoliated. What remains of the dead bone is seen at the bottom of the bottle. The surface from which the dead bone has separated, is very vascular. New bone is deposited in considerable quantity around the exfoliating portion.

This preparation was made in the same manner as No. 7. Experiment by Mr. Stanley.

- 9 Tibia of a Dog, in which the shaft of the bone has died. The dead bone is in great part absorbed, and a new bone is in progress of formation around it. The periosteum which belonged to the old bone covers the new bone. Many fistulous holes extend through the walls of the new bone into the cavity which contained the old bone. This cavity is lined by very vascular granulations. The remains of the old bone are at the bottom of the bottle.

This preparation was made artificially. The walls of the bone were perforated, and the medulla destroyed. The bone was laid bare for that purpose at the part where the new bone is still incomplete. Experiment by Mr. Stanley.

- 10** Tibia of a Dog, in which the shaft of the bone, in its whole length, has died. The periosteum has separated from it, and is thickened. Upon the internal surface of the separated periosteum, the formation of the new bone has commenced by irregular depositions of osseous matter. The old bone, at its extremities, still retains connexion with the periosteum, hence it has received some injection.

The death of the bone was produced by the destruction of the medulla, as in No. 9.
Experiment by Mr. Stanley.

- 11** Tibia of a Dog, in which the shaft of the bone has died. The dead bone is in progress of separation, and the new bone is formed around it. The periosteum which belonged to the old bone covers the new bone.

The death of the bone was produced by destruction of the medulla, as in No. 9. Experiment by Mr. Stanley.

- 12** Tibia of a Dog, exhibiting the process of reparation after the loss of a portion of its walls. The space left by the lost bone is in part filled by new matter, deposited from the vessels of the medulla.

A hole was, in this instance, drilled through the walls of the bone, and after some time, the animal being killed, the changes here described were found to have taken place.
Experiment by Mr. Stanley.

- 13** Section of a Tibia from a Stump, exhibiting the change which has taken place in the end of the bone, consisting of the closure of the medullary cavity, by a thin layer of osseous substance.

- 14** Portion of a Femur from a Stump. The medullary cavity is completely closed, and there are two pointed processes of bone, which extended from the end of the femur into the surrounding soft parts.

- 15** Section of a Tumor, consisting of cartilaginous substance, with specks of bone dispersed through it. The remaining part of this tumor, consisting principally of bone, is preserved dry. E. 10.

- 16** Os Calcis, a portion of which has died, and is separated by exfoliation. There is ankylosis of the os calcis to the os cuboides.

- 17** Portion of the Lower Jaw of a Child, which separated by exfoliation. It contains two teeth of the temporary set, and the rudiments of three of the permanent set.

- 18** Portion of a Tibia, exhibiting a superficial exfoliation of its walls. The formation of the groove between the dead and the living bone has commenced; and there is a deposition of new bone from the periosteum around the dead bone.

- 19 Sections of a Tibia, the walls of which have perished through the whole shaft of the bone, and are in progress of separation from the cancellous and medullary texture, which has preserved its vitality. The groove formed between the dead and the living bone is filled with soft and very vascular granulations. From the internal surface of the periosteum new bone is forming, to supply the place of that which has perished.
- 20 Portion of a Tibia from a compound fracture, exhibiting the changes in the periosteum and bone, preparatory to the exfoliation of the fractured extremity. The Periosteum is thickened and very vascular, and granulations have grown from its torn margin; a portion of it is detached and turned back, to shew the subjacent bone in a higher state of vascularity than natural. The extremity of the bone has acquired the peculiar whitish colour of dead bone.
- 21 Portion of a Tibia from a compound fracture, exhibiting exfoliation of the broken extremity of the bone in its early stage. The dead bone is distinguishable from the living by its peculiar whiteness. The separation of the dead bone has commenced by the formation of a superficial groove in the adjacent living bone. Granulations have arisen from the exposed medulla.
- 22 Section of a Femur, and of part of a Tumor which surrounds it. The tumor exhibits various textures. In some parts it consists of soft matter, arranged in cells filled by gelatinous fluid; in others it consists of cartilaginous matter, mixed with spiculæ of bone. The bone itself is natural, except that its external surface is rough and deprived of the periosteum.

Cast of the Limb from which No. 22 was taken. No. 1.
- 23 The front of the Lower Jaw of a Child, which was removed by operation, on account of a tumor arising from the cancellous texture of the bone, and thence protruding into the mouth. In the progress of the operation, the front of the jaw separated into an upper and a lower portion. With the upper portion there is a part of the tumor which was lodged in a cavity of the bone formed by the absorption of its cancellous texture, and by the separation of its anterior and posterior walls. The tumor consisted throughout of a red and fleshy mass, resembling a piece of lacerated spleen.
- 24 Tibia, exhibiting a peculiar alteration of structure in its upper two thirds. The external surface of the bone has become of a whitish colour, and of a rough and very porous texture. From this diseased structure, a growth of very fine bony fibres has arisen, which shoot outwards from the surface of the bone.
- 25 Section of a large Tumor growing from the lower part of the Femur, consisting of an intermixture of cartilaginous and osseous matter. A part of the morbid structure is seen extending itself from one side of the bone, through the interior, almost to the opposite side.
- 26 Femur affected with the same kind of disease as No. 24. The body of the bone has been in great part destroyed by ulceration. Around the ulcerated part, the bone is rough and porous.

The masses of fine bony fibres connected with the bone originally grew from it, but were separated in the maceration. The diseased structure growing from the thigh bone formed a tumor of very large size. The remaining part of this tumor is preserved moist. No. 27.

- 27 Section of the Tumor referred to in No. 26, consisting of an intermixture of fleshy substance and fine bony fibres.

The Cast of the limb from which the two preceding specimens were taken. No. 2.

- 28 Sacrum, exhibiting a large cavity in its interior, which contained pus. The walls of the bone seem to have been expanded, and are in part removed by ulceration.

- 29 Section of a Tibia, with the soft parts covering it, exhibiting the effects of Ulceration. This section was made longitudinally through the middle of the tibia; the other half of the tibia and the fibula are in the bottle No. 30. By viewing the two preparations together, it will be seen that the ulcerative process has extended completely through the body of the tibia, in a great part of its length, and has even reached the fibula, as is evinced by the peculiar excavated appearance of its surface. No attempt has been made to restore the lost bone; there is merely a slight deposition of bony matter upon the surface of the fibula, opposite to that which is in progress of ulceration. The interosseous ligament is in part converted into bone. The integuments around the hollow which has been left by the ulceration are much changed in structure; they are swollen, and of a peculiar granulated appearance.

- 30 Portions of a Tibia and Fibula, exhibiting the effects of Ulceration. The description of this preparation is comprised in the preceding.

- 31 Lower extremity of a Femur, exhibiting the effects of Ulceration, with an irregular deposition of bony matter around the ulcerated surface.

- 32 A large Cyst connected with the upper part of the Tibia. The disease seems to have commenced in the head of the tibia. The walls of the bone are completely absorbed, so that the parietes of the cyst are now formed above by the cartilage which covered the head of the bone, and in the other directions, by condensed cellular tissue. A large portion of the cyst has been removed, to give a clear view of its interior.

- 33 Portion of Integuments removed from a diseased Bone, exhibiting a peculiar change of structure in the skin, with thickening of the subjacent parts.

- 34 Section of the Femur of a rickety Child curved in consequence of the want of its natural hardness; its structure, instead of the natural division into solid walls and medullary cavity, consists throughout of a cartilaginous and gelatinous substance intermixed, and disposed in cells. It is observable, that a greater quantity of the cartilaginous substance is deposited in the centre of the bone, and towards the interior curve. The articular ends of the bone are in a natural state.

- 35 Sections of the Femur and Tibia of a rickety Child. The bones, which have become curved from a want of their natural hardness, have recovered their solidity, the curvature still remaining. In the Femur, the walls of the bone in the centre, and along the interior curve, have acquired a greater thickness than elsewhere. In the Tibia, the bone is rendered perfectly solid in the situation of the curve; and it is observable, that in the same situation, the bone is flattened from side to side.

The two preceding specimens are described by Mr. Stanley. *Medico-Chirurgical Transactions*, vol. vii. p. 404.

- 36 Portions of a Skull thickened and converted into a substance like hardened mortar.
- 37 Sections of the lower end of a Tibia and Fibula. The walls of the bones have become soft, the natural structure of the cancelli is changed by the entire removal of the earthy matter, and the deposition in its stead, of a soft caseous substance. These are the changes in bone peculiar to Scrofula.
- 38 Sections of the articular ends of a Femur and Tibia, exhibiting the same changes of structure as No. 37.
- 39 Section of the Head, Neck, and upper part of the Shaft of a Femur. From a young subject. The cancellous structure is filled throughout by a soft caseous substance, similar to that which exists in the two preceding specimens. The cartilage covering the head of the bone is sound.
- 40 Bones of the Wrist, exhibiting the effects of Ulceration. In the ends of the radius and ulna the ulceration seems to have commenced in the interior of the bone.
- 41 Section of a Tibia, and of a Tumor which has formed around it. That half of the tumor, the vessels of which have freely received the injection, is of a soft and fleshy texture. The other half, into which the injection has not so freely penetrated, consists of a mixture of cartilaginous and of osseous matter. The morbid growth is very closely connected with the periosteum in the whole circumference of the tibia. The internal part of the tibia is sound.

Presented by William Brewer, esq.

- 42 Section of a Tibia, exhibiting a growth of soft vascular fungus from the Periosteum. The periosteum, for some distance above and below the seat of the fungus, has become of a soft and spongy texture, and its connexion with the bone is loosened. The bone itself is healthy, except that there had been an irregular absorption of its external surface, which is distinctly seen in the two smaller portions of the tibia and fibula.
- 43 Bones of the Knee-Joint, exhibiting a peculiar alteration of texture. The diseased bone is not softened; it has a yellow colour, apparently derived from a peculiar secretion into the

cancelli. In some situations ulceration has taken place on the exterior of the diseased bone. The Epiphyses are separated from the rest of the bone. The articular cartilage is in some parts absorbed.

- 44 Section of a Femur. The other portion of the bone is described in No. 43.
- 45 Os Innominatum, exhibiting a peculiar alteration of structure. The natural texture of the bone is converted throughout into a peculiar substance, which in some situations, has a granulated, and in others, a fibrous appearance. In the upper part of the specimen, the walls of the bone are separated, to display the peculiar fibrous substance which is between them.
- 46 Section of the lower part of a Femur, and of a Medullary Tumor surrounding it. The Tumor is covered by the synovial membrane of the knee-joint; and a part of it is covered by the cartilage which belonged to the end of the femur. The diseased structure may be traced to the cancellous and medullary texture of the femur, in which it seems to have originated.
- 47 Sections of the Head, Neck, and Shaft of a Femur, exhibiting suppuration in the cancellous and medullary texture. The substance of the bone has undergone no further alteration than the secretion of pus into it, and an increase of its vascularity.
- 48 Tibia, exhibiting on its external surface a mottled appearance, from irregular effusions of blood into its substance.

The three preceding specimens were taken from the same individual. The thigh was amputated, and it was believed that the suppuration in the medullary texture of the upper part of the femur was consequent on the operation.
- 49 Sections of a Humerus, and of a Medullary Tumor which has arisen from it. In one of the sections, a small portion of the diseased structure, distinct from the general mass, has protruded through the walls of the bone. In the other section, the morbid structure is covered by the articular cartilage which belonged to the head of the bone.
- 50 Section of a Tibia, exhibiting a deposition of Lymph in the medullary cavity. Upon the external surface of the bone, in some situations, there is ulceration; in others, there are irregular depositions of osseous matter.
- 51 Section of a Tibia, exhibiting a diseased state of the medulla, with partial obliteration of the medullary cavity by bone. On the external surface of the tibia two distinct processes are observed, viz. ulceration in some parts, and deposition of bony matter in others. At the lower end of the tibia are two small portions of bone, dead, and undergoing exfoliation.

- 52 Section of a Femur exhibiting a diseased state of the Medulla. An irregular deposition of bony matter has taken place upon the external surface of the bone. In some situations this deposition is connected only with the periosteum; in others, it appears to arise from the bone itself.

The two preceding specimens were taken from the same limb.

- 53 Section of a Tibia, exhibiting great increase of thickness in its walls. The periosteum is detached for the purpose of shewing its thickened state upon the diseased part of the bone.
- 54 Portion of the Skull-Cap of a Child, which is very much thickened, and so soft in its texture as to be easily divisible by a knife. The bone exhibits throughout an appearance of great vascularity. This state of the bone existed from birth.

Presented by William Kingdon, esq.

- 55 Section of Dorsal and Lumbar Vertebrae, exhibiting absorption of their bodies, which was consequent on an aneurism of the aorta. The surface of bone in progress of destruction formed part of the aneurismal sac. It will be observed, that the fibro-cartilages are entire.
- 56 Bones of the Elbow-Joint, exhibiting Ulceration with Enlargement of the articular ends. Sections have been made of the humerus and ulna, to shew the extent of the enlargement, which is greatest in the latter bone. The enlargement of the bones does not depend upon an addition of new matter to their exterior.
- 57 Necrosis of the Shaft of a Tibia, in which the process of reparation is nearly completed. A small portion of the dead bone still remains. The new bone exhibits a remarkably porous texture.
- 58 Necrosis of the Shaft of a Tibia. Portions of the dead bone still remain. Many fistulous holes are seen in the new bone, leading to the cavity in which the dead bone is contained.
- 59 Tibia, exhibiting an extensive Ulceration of its walls. There is no appearance of reparation.
- 60 Section of the upper end of a Fibula, and of a Tumor, which is connected with it. The tumor consists of a mixture of bone and soft substance; and it seems to have arisen from the periosteum.
- 61 Sections of a Fibula exhibiting upon its external surface depositions of fine bony fibres. Around these depositions, the walls of the bone are ulcerated. The medullary cavity is in part obliterated.
- 62 Sections of the Bones of the Face, exhibiting an Osseous Growth, completely filling the

maxillary sinuses. The septum nasi and spongy bones are also converted into a thick and very hard osseous substance.

- 63 Sternum, in which there is Necrosis of the central part and whole thickness of the bone. The dead bone, not yet separated, is surrounded by newly deposited osseous substance.
- 64 Tibia, exhibiting Necrosis of a portion of its external surface. The dead bone, distinguishable by its black colour, is in progress of separation from the living bone, which is evident from the formation of a deep groove between them. The walls of the bone, around the exfoliating portion, are thickened, and of a porous texture.
- 65 Tibia from a young subject, in which there has been Necrosis of the Shaft in its whole extent. The old bone is in part absorbed, and there are several distinct depositions of new bone around it.
Presented by A. Sicard, esq.
- 66 Bones of the Fingers which separated by exfoliation.
- 67 Portions of the Tibia which separated by exfoliation.
- 68 Portion of the Tibia which separated by exfoliation. It comprises the whole cylinder of the bone.
- 69 Necrosis of the whole Shaft of the Tibia, exhibiting the formation of new bone around the old and dead bone.
- 70 Section of the lower end of the Femur of a Child, in which an Abscess has formed. The cavity which contained the matter is situated in the cancellous texture, immediately above the epiphysis. The internal surface of this cavity was lined throughout by a membrane, a part of which is still seen.
- 71 Osseous Tumor growing from the external table of the Skull. The outer part of this tumor is very dense: within, it is of a cancellous structure.
- 72 Portion of the Lower Jaw of a Child, containing two Teeth, which separated by exfoliation.
- 73 Portion of the Radius, in which a peculiar change of structure has taken place in its lower end. A groove between the diseased and the sound part of the bone indicates that a separation of the former is taking place. An abundant deposition of osseous substance is observable on the sound bone, immediately around the diseased part.
- 74 Sections of the Tibia and Fibula. Both bones are greatly thickened throughout in their walls. The interosseous ligament is ossified. A portion of the tibia near its lower end has been destroyed by ulceration, which has penetrated almost through the entire thickness of the

- bone. The ulcerated surface of the bone is covered by a thick and tough membrane. The medullary cavity, immediately above the ulcerated part, is obliterated by osseous deposition.
- 75 Section of a Tibia. The walls are thickened throughout. The medullary cavity is obliterated by osseous deposition, except in one part towards the upper end of the bone. The periosteum is every where altered in its texture, but especially so at the lower part of the bone, and in the latter situation, a fleshy growth has taken place from the altered periosteum.
- 76 Section of the lower part of a Tibia. This forms the other half of the section in No. 75. It exhibits the fleshy growth from the periosteum, which is seen to retain its close connexion with the bone.
- 77 Portions of the Sternum and Ribs. There is a cavity in the sternum filled with a soft and white substance. This cavity was covered by a membrane, which was, apparently, the periosteum in a thickened state.
- 78 Portion of a Tibia, exhibiting a peculiar change of structure which extends entirely through the bone. Both its walls and its internal part are converted into a soft and crumbling matter, of a whitish colour. The morbid alteration does not extend quite to the articular end of the bone. The integuments, in the extent to which they correspond with the diseased bone, have also undergone complete alteration of structure. There is a division in the upper part of the diseased bone; it is uncertain whether this was produced by the natural process of separation, or by accident.
- 79 Portion of the Skull which exfoliated after the application of the trephine.
- 80 Portion of the Tibia from a compound fracture, illustrating the process of Exfoliation. The end of the bone has perished. A deep and irregular groove has formed immediately around the dead bone, and a considerable deposition of osseous matter has taken place upon the contiguous living bone.
- 81 Portion of the Tibia from a compound fracture. The appearances are the same as in the preceding specimen.
- 82 Sections of the lower part of a Tibia, exhibiting a large cavity within the cancellous texture. This cavity is lined by a soft and vascular membrane, and it contained a serous fluid. There is an aperture in the cavity, which leads to the external surface of the bone.
- 83 Section of the upper part of the Tibia, and of a Tumor which has formed around it. This tumor consists partly of a brown fibrous substance, and partly of coagulated blood. A thin crust of the walls of the bone surrounds the tumor. Upon the upper part of the tumor is an excavation which lodged one of the condyles of the femur. The diseased structure may be traced to the cancellous texture of the tibia, in which it seems to have originated.

- 84 Section of the lower part of a Femur, the cancelli of which are filled by morbid growth, consisting of medullary matter. The walls of the bone and the cartilage are sound, except in one situation where they are absorbed. Tumors have formed around the bone. Sections of some of these shew that they consist of the same kind of matter as is deposited in the interior of the bone.
- 85 Section of a Molar Tooth, and of a Bony Tumor which has apparently grown from the base of the crown and from the fang.
- 86 Portions of a Humerus with which a tumor is connected, which apparently originated in the bone. Great part of the body of the humerus has been absorbed. The tumor connecting the remaining portions of the bone consists of soft substance, in the centre of which is a large cavity, which contained a gelatinous fluid. The brachial artery and nerves are attached to the exterior of the tumor, but they are healthy.
- 87 Portions of a Tibia and Fibula which have suffered a compound fracture; the fractured ends of both bones have overlapped, and exfoliation of the ends of the tibia has commenced. There is a superficial groove between the dead and the living bone, with an irregular deposition of osseous matter upon the contiguous surface of the tibia.
- 88 The Lower Half of a Tibia which has suffered a compound fracture. The fractured ends have been left at some distance from each other, and have become united by two portions of bone extending transversely between them. At the bottom of the bottle, there is a piece of bone which exfoliated from the upper end of the fracture.
- 89 Section of a Tibia shewing the process of restoration after a compound fracture. The union of the fractured ends of the bone is effected by an irregular and very abundant deposition of osseous matter. For a considerable space above and below the place of union, the medullary cavity is obliterated. The surrounding cellular tissue, much thickened, was firmly adherent to the external surface of the bone above and below the place of union. A portion of this thickened cellular tissue has been detached and turned downwards.
- 90 Portion of a Fibula which has been fractured. The fractured ends not being in apposition, and overlapping each other, union has taken place laterally by bony matter deposited from the periosteum.
- This specimen was taken from the same individual as No. 89.
- 91 Portion of a Tibia exhibiting a fracture in progress of union. The fractured ends overlapping a little, are joined together by bony matter. In one half of the bone, and towards its lower end, there has been another fracture which has firmly united.
- 92 Section of a Humerus, in which there has been a fracture, which has united with the ends of

the bone in exact apposition. A slight deposition of bony matter has taken place into the medullary cavity, in the situation of the fracture.

- 93 Portions of the Femur, Tibia, and Fibula. A peculiar change of structure has taken place in the femur, which extends from the condyles upwards into the shaft of the bone. Ulceration has penetrated the diseased bone, just above the condyles. Irregular depositions of osseous matter have taken place into the soft parts, around the diseased bone.

DISEASES OF BONE CONTINUED.

SPECIMENS NOT CONTAINED IN BOTTLES.

BONES WHICH ARE THICKENED IN THEIR WALLS.

- A. 1 Femur, Tibia, and Fibula, generally thickened, with obliteration of the medullary cavity.
From the same individual as the specimen of thickened tibia in the bottle No. 74.
- A. 2 Two Femora, two Tibiæ, and two Humeri, partially thickened.
From the same individual.
- A. 3 Two Tibiæ generally thickened.
From the same individual.
- A. 4 Tibia partially thickened.
- A. 5 Two Femora generally thickened.
From the same individual.
- A. 6 Two Femora generally thickened.
From the same individual.
- A. 7 Tibia generally thickened.
- A. 8 Tibia partially thickened.
- A. 9 Tibia generally thickened.
From a young subject.
- A. 10 Tibia and Fibula partially thickened.
From a young subject.

- A. 11 Femur, Tibia, and Fibula, generally thickened.
From the same individual.
- A. 12 Tibia generally thickened.
- A. 13 Tibia partially thickened.
- A. 14 Tibia and Fibula partially thickened, with ossification of the interosseous ligament.
- A. 15 Tibia and Fibula generally thickened, with ossification of the interosseous ligament.
- A. 16 Sections of a Tibia and Fibula. Both bones are thickened, and there is ossification of the interosseous ligament.
- A. 17 Humerus generally thickened.
- A. 18 Femur thickened in its lower part, immediately above the condyles.
- A. 19 Section of a Tibia partially thickened.
The other half of the same bone is preserved in the bottle No. 53.
- A. 20 Tibia partially thickened.
- A. 21 Fibula partially thickened.
- A. 22 Tibia partially thickened.
- A. 23 Sections of a Tibia partially thickened.
- A. 24 Section of a Tibia partially thickened.
- A. 25 Tibia and Fibula, with part of the Tarsus. The tibia and fibula are thickened. The os calcis, astragalus, naviculare, and cuboides, are all united by osseous matter.
- A. 26 Section of a Femur partially thickened.
- A. 27 Section of a Tibia partially thickened.
- A. 28 Tibia and Fibula thickened in their walls, with growths of bone from their external surface.
- A. 29 Portions of a Skull-Cap exhibiting obliteration of the diplöe, with thickening of its tables.
- A. 30 Skull-Cap. Both its tables are increased in thickness and density, and its diplöe is obliterated throughout.

- A. 31 Skull-Cap, generally thickened.
- A. 32 Skull-Cap, thickened chiefly in its internal table.
- A. 33 Portions of the Skull-Cap increased in thickness and converted into a spongy texture.
- A. 34 Section of a Tibia considerably thickened in its walls, with partial obliteration of the medullary cavity. The effect of venereal disease.
- A. 35 The Skull, Femur, Humerus, Radius, and Clavicles, from the same individual. The skull exhibits in some situations, thickening, and in others, ulceration of its outer table at many distinct points. The femur is greatly thickened in the whole of its shaft. The humerus, the radius, and the clavicles, are also greatly thickened in their walls.
- Presented by Wm. Beaumont, esq.
- A. 36 Sections of a Tibia, with the Fibula. The shaft of the tibia is enlarged throughout. Upon its external surface there is an irregular deposition of bone. Internally it consists throughout of a cancellous texture, in which there is no medullary cavity. Upon the fibula there is an irregular deposition of osseous matter.

BONES WHICH ARE PARTIALLY DESTROYED BY ULCERATION.

- B. 1 Portion of a Tibia, exhibiting an ulcer on its external surface. Around the ulcer the bone is thickened, and has a porous appearance.
- B. 2 Tibia and Fibula. Ulceration has penetrated the walls of the tibia to its medullary cavity. A deposition of bone has taken place upon the fibula, and there is ossification of the interosseous ligament.
- B. 3 Portion of a Tibia exhibiting superficial ulceration, with thickening of the bone around the ulcerated surface.
- B. 4 Portion of a Tibia exhibiting superficial and extensive absorption of its surface. A fleshy tumor, originating in the soft parts, was found extending completely around this part of the bone.
- B. 5 Portion of a Tibia exhibiting deep ulceration of its walls, with thickening of the surrounding bone.

- B. 6 Portions of the Tibia and Fibula. Ulceration of the walls of the tibia has penetrated to its medullary cavity. The fibula is thickened, and the interosseous ligament is extensively ossified.
- B. 7 Os Frontis, exhibiting ulceration of its outer table penetrating to the frontal sinus.
- B. 8 Section of a Tibia exhibiting superficial ulceration, with a considerable deposition of osseous matter around the ulcerated surface.
- B. 9 Skull-Cap, exhibiting peculiar changes of structure resulting from the venereal disease. In some situations there has been a complete destruction of the bone through both tables of the skull, and here the disease seems to have stopped, and the parts appear to have cicatrised. In other situations, the disease appears to be still in progress, the bone here exhibiting a rough surface and porous texture.
- B. 10 Skull-Cap, exhibiting ulceration, which has penetrated both its tables. The effect of venereal disease.
- B. 11 Portions of the Skull-Cap exhibiting superficial ulceration of its outer table, with great thickening of the inner table and obliteration of the diplöe. The effect of external violence.
- B. 12 Skull-Cap, exhibiting extensive ulceration of the outer table, and ulceration to a less extent of the inner table. It is presumed these changes were consequent on the formation of matter within the diplöe.
- B. 13 Skull-Cap, exhibiting absorption of the bone in numerous distinct spots. The absorption, commencing in the inner table, has, in some situations, penetrated to the outer. It is presumed the absorption of the skull was occasioned by morbid growths from the external surface of the dura mater.
- B. 14 Skull-Cap, exhibiting extensive ulceration, commencing in the outer table.
- B. 15 Skull-Cap, exhibiting ulceration which, in some situations, has penetrated both its tables, and in others, is confined to the inner table.
- B. 16 Skull-Cap, exhibiting extensive and superficial ulceration of the outer table.
- B. 17 Portion of a Skull exhibiting extensive ulceration of the outer table, which has commenced in many distinct situations. It is presumed that this change was consequent on the formation of matter within the diplöe.
- B. 18 Skull-Cap, exhibiting superficial ulceration of the outer table of the frontal bone.

- B. 19 Skull-Cap, exhibiting ulceration of the outer table, with thickening of the inner table in the corresponding situation.
- B. 20 Skull-Cap, exhibiting general thickening of both tables of the frontal bone, with slight ulceration of the outer table in one situation.
- B. 21 Skull-Cap, exhibiting ulceration, which commenced in the outer table.
- B. 22 Skull-Cap, exhibiting ulceration of the outer and inner tables.
- B. 23 Skull-Cap, exhibiting superficial ulceration of the outer table of the frontal bone, with thickening of the inner table.
- B. 24 Portion of the Basis of the Skull exhibiting ulceration of the palate. The effect of venereal disease.
- B. 25 Skull-Cap, exhibiting many large ulcerated holes, occasioned by tumors originating in the dura mater.
- B. 26 Basis of the Skull, from a young subject, exhibiting extensive ulceration of a part of the parietal and temporal bones.
- B. 27 Portion of a Tibia exhibiting superficial ulceration, with a porous appearance of the surrounding bone.
- B. 28 Portions of the Tibia and Fibula. A large portion of the shaft of each bone has been removed by ulceration.
- B. 29 Skull-Cap, in which there is extensive ulceration of the outer table at many distinct points, with some thickening of the inner table. It is presumed the ulceration of the outer table was the consequence of suppuration in the diplöe. The effect of venereal disease.
From the same patient as the thickened bone A. 34.
- B. 30 Clavicle. Ulceration has penetrated through the centre of the bone. Osseous deposition has taken place around the ulcerated part. The effect of venereal disease.
From the same patient as B. 29.
- B. 31 Tibia and Fibula. A large portion of the shaft of the tibia, in its entire thickness, has been removed by ulceration. The inferior portion of the tibia is united to the fibula by bone. The fibula is greatly thickened in its whole extent, and in its centre there has been a fracture which has firmly united.
- B. 32 Five dorsal Vertebrae, exhibiting ulceration commencing upon the anterior surfaces of three of their bodies.

BONES, IN WHICH THERE ARE CAVITIES PRODUCED BY INTERNAL ABSORPTION.

- C. 1 Sections of a Tibia, exhibiting a wide cavity extending completely through the interior of the bone, and resulting from absorption of its cancellous and medullary texture. The walls of the bone are a little thicker than natural.
- C. 2 Sections of a Femur, in which there is an enlargement of the medullary cavity, with thinning of the walls.

BONES, PORTIONS OF WHICH HAVE DIED. (NECROSIS.)

- D. 1 Tibia, in which there has been Necrosis of the whole central portion of its shaft. A new shaft has been formed, and the dead bone is almost removed by absorption.
- D. 2 Sections of a Femur in which there has been Necrosis of the shaft in its whole extent. The formation of the new bone is complete. A considerable portion of the old bone remains.
- D. 3 Portion of a Femur in which there has been Necrosis of the lower part of the shaft. The new bone is incomplete. A portion of the old bone remains.
- D. 4 Tibia, in which there has been Necrosis of the upper half of the shaft. The new bone is incomplete. A portion of the old bone remains.
- D. 5 Tibia and Fibula. There has been Necrosis of the whole shaft of the Tibia. A new shaft has been formed. Portions of the old bone remain within it. There is extensive ossification of the interosseous ligament.
- D. 6 Portion of a Femur in which there has been Necrosis of nearly the whole of the shaft. The new bone is perfect, and the old bone has been completely removed by absorption.
- D. 7 Tibia, in which there has been Necrosis of the entire shaft. The new bone is perfect, and the old bone is removed by absorption.
- D. 8 Femur, in which there has been Necrosis of nearly the whole shaft. The new bone is perfect, and the old bone is completely absorbed.

- D. 9 Sections of a Tibia in which there has been Necrosis of a portion of the cancellous texture near its head.
- D. 10 Section of a Tibia exhibiting superficial Necrosis of its walls. A groove has formed around the dead bone, and there is a considerable deposition of osseous matter upon the surrounding living bone.
- The other half of this bone is contained in the bottle No. 18.
- D. 11 Skull-Cap, exhibiting Necrosis of a large portion of both its tables. A groove has formed around the dead bone. Two applications of the trephine were made in the dead bone, with the expectation of finding matter beneath it. The necrosis was produced by a burn.
- D. 12 Skull-Cap, exhibiting extensive Necrosis of its outer table, with thickening of the inner table. A groove has formed around the dead bone.
- D. 13 Skull-Cap, exhibiting extensive Necrosis of the outer table. A groove has formed around the dead bone.
- D. 14 Skull, exhibiting extensive Necrosis of both tables. The dead bone has been in part removed.
- D. 15 Skull-Cap, exhibiting Necrosis of a portion of its outer table, with thickening of the inner table to a corresponding extent. The dead bone is of a black colour.
- D. 16 Skull-Cap, in which there has been Necrosis, penetrating both its tables in several distinct situations.
- D. 17 Skull-Cap, in which there has been Necrosis of a considerable portion of the outer table, with thickening of the inner table to a corresponding extent.
- D. 18 Skull-Cap, exhibiting extensive Necrosis of the outer table, and to a small extent, of the inner table.
- D. 19 Skull, exhibiting extensive Necrosis of both its tables. The effect of venereal disease.
- D. 20 Humerus, in which there has been Necrosis of the lower two thirds of the shaft. A considerable deposition of new bone has taken place around the dead portion, which has not yet separated. The effect of venereal disease.

From the same individual as the thickened bone A. 34.

- D. 21 The lower end of a Tibia, which separated by exfoliation in a case of compound fracture.

Presented by R. S. Eyles, esq.

BONES FROM WHICH TUMORS HAVE ARISEN.

- E. 1 Section of a Skull exhibiting an ivory-like Tumor growing from the outer table of the frontal bone, just above the external angular process.
- E. 2 Section of a Clavicle, from the scapular end of which, a large bony Tumor has arisen. The section of the tumor shews that it has a cancellous structure throughout.
- E. 3 The upper part of a Femur exhibiting a bony process of a pyramidal form and about three inches in length, continued from the trochanter minor. To the extremity of this bony process the tendon of the psoas and iliacus muscles is attached.
- E. 4 The upper part of a Femur exhibiting a bony process about three inches in length, which was connected with the trochanter minor by ligamentous substance.
- E. 5 Humerus, exhibiting a bony Tumor, with a broad base, growing from the side of its shaft.
- E. 6 Femur, exhibiting a bony Tumor, with a broad base, growing from the outer side of its shaft.
- E. 7 Portions of Bone which were found in the muscles close to the Femur E. 6.
- E. 8 Humerus, exhibiting a bony Tumor, growing from the front and upper part of its shaft. The tumor is much narrower at the point of its connexion with the shaft than elsewhere.
- E. 9 Femur, from the whole circumference of which a Tumor of very large size has arisen. It extends from the condyles to nearly the upper end of the bone. The small portions of the femur remaining above and below the tumor are sound. What may be the structure of that part of the bone from which the tumor has arisen cannot be stated, as no section has been made of it. The tumor itself consists of a mixture of earthy and animal matter, the former being deposited in very fine fibres, which are variously arranged.
- E. 10 Sections of a Femur and of the Os Innominatum, from which a Tumor of large size has arisen. The tumor has arisen principally from the Femur. It consists throughout of a very hard osseous substance. There has been a fracture of the shaft of the femur, a little below the trochanter minor, which has firmly united. This fracture occurred before the growth of the tumor commenced. There was a very much larger part of this tumor, consisting principally of cartilaginous substance, a portion of which is preserved in the bottle No. 15.

Cast of the limb from which the preceding specimen was taken. No. 3.

BONES AFFECTED WITH RICKETS.

- F. 1** Femur, Tibia, and Fibula, from a young subject. The bones are considerably curved, but have regained their natural firmness.
- F. 2** Femur, Tibia, and Fibula, from an adult. The bones are considerably curved, but have regained their firmness.
- F. 3** Portion of the Femur of an adult considerably curved in its upper part.
- F. 4** The upper parts of two Thigh-Bones from the same individual. From the softened condition of the bone, the head of each femur has descended below the level of the upper end of the trochanter major. There is no shortening of the neck of the bone.
- F. 5** Two Thigh-Bones from the same individual. The shafts of the bones are curved, and the head of each bone has descended below the level of the upper end of the trochanter major.
- F. 6** Section of the Femur of an adult. The shaft is greatly curved. The walls of the bone are much thicker on the concave than on the convex side of the curve.
- F. 7** Fibula of an adult. Its shaft is curved and flattened.

SECOND SERIES.

DISEASES OF JOINTS.

- 1 ANKLE-JOINT, exhibiting the effects of Inflammation. The articular cartilages are completely destroyed, and the bones are in a state of ulceration.
- 2 Astragalus, exhibiting the effects of Inflammation. The articular cartilage is absorbed, and at one point, the bone is beginning to ulcerate.
- 3 Knee-Joint, exhibiting the effects of Inflammation. An abundant deposition of lymph has taken place from the internal surface of the capsule.
- 4 Ankle-Joint, exhibiting Ulceration of the Cartilages and Bones. The ulcerated surface of the bones is very vascular.
- 5 Ankle-Joint, in which the cartilages are absorbed, and the exposed bone is covered with lymph.
- 6 Sections of the Condyles of a Femur. The connexion of the articular cartilage with the bone was loosened to such an extent that its separation could be readily effected. Portions of the cartilage have been detached and turned downwards to shew the appearance of the surface which was connected with the bone.
- 7 Knee-Joint, in which Anchylosis has taken place in consequence of a deposition of lymph from the opposing surfaces of the synovial membrane rendering them adherent. A portion of the adherent synovial membrane is stripped off and turned backwards. The patella has become firmly united to the external condyle of the femur, and the tibia and fibula have been drawn backwards under the femur by the flexor muscles, so as to give a very oblique direction to the external lateral ligament.
- 8 Condyles of the Femur, exhibiting a peculiar change of structure in the articular cartilage. The cartilage is thickened and softened throughout, and a portion of it is turned downwards to shew a partial absorption of its substance, which has taken place on the surface next to the bone.

- 9 Patella, exhibiting the absorption of its cartilage in a peculiar manner.
- 10 Os Calcis and Astragalus, the articular surfaces of which are whitened by a deposition of earthy matter upon them, consisting principally of carbonate of lime.
- 11 Patella, the cartilage of which is whitened by the deposition of earthy matter upon it.
From the same individual as the preceding specimen.
- 12 Elbow-Joint, exhibiting a peculiar change of structure in the synovial membrane; it is converted into a light brown substance, of a firm texture, about half or three quarters of an inch in thickness, and with white lines running through it in various directions. The morbid change terminates at the margins of the articular cartilages. Around the neck of the radius, the thickened synovial membrane forms a fold projecting into the cavity of the joint.
- 13 Anchylosis of the Bones of the Carpus, with Necrosis of the lower end of the Radius. A considerable portion of the end of the radius has died, and is in progress of exfoliation. The cartilage between the ulna and the carpus is completely destroyed. The several bones of the carpus have had their cartilaginous surfaces destroyed by ulceration, and anchylosis has taken place between them.
- 14 Hip-Joint, exhibiting the effects of Inflammation. The cartilage has completely separated, both from the head of the femur and from the acetabulum. Some remnants of the separated cartilage are loose in the cavity of the joint. The ligamentum teres is destroyed. The exposed surfaces of the bones are in a state of ulceration. The cavity of the acetabulum is much widened by ulceration of the bone.
- 15 Portion of a Femur, exhibiting the absorption of a great part of the head of the bone.
- 16 Portion of a Femur, exhibiting the absorption of a part of the head, and the whole of the neck of the bone. A portion of the head remains, but it is completely detached.
- 17 Hip-Joint, exhibiting the effects of Inflammation. The capsule and the cartilage covering the head of the femur are completely destroyed by ulceration; the head of the bone is dislocated from the acetabulum, and is drawn upwards and backwards upon the dorsum of the ilium.
- 18 Hip-Joint, exhibiting the complete removal of the acetabulum, and of the head and neck of the femur, by ulceration.
- 19 Hip-Joint, in which the articular cartilage covering the acetabulum and head of the bone is completely destroyed. The acetabulum is enlarged by ulceration of the bone. The ligamentum teres is in great part destroyed.

- 20 Hip-Joint, the acetabulum of which is greatly enlarged and altered in its form. The head of the femur is enlarged and adapted in its form to the acetabulum. The capsule of the joint was entire, but considerably thickened.
- 21 Hip-Joint, in which the head and neck of the femur have been completely absorbed. The walls of the acetabulum have been also absorbed. The surfaces of the femur, and of the os innominatum, which were in contact, have become adapted to each other, and covered by cartilaginous substance, so as to form a sort of joint. A thick capsule extended around this newly formed joint. These changes were consequent on disease.
- 22 Shoulder-Joint, exhibiting ulceration of the articular cartilage, with change of structure in the capsule. The capsule is generally thickened, and there are numerous small pendulous processes of fat, with two larger masses of bone attached to its internal surface.
- 23 Bones of the Wrist, exhibiting the effects of Inflammation in the whole of the carpal and metacarpal joints. The articular surfaces of the several bones are extensively ulcerated, and there is a very abundant deposition of osseous matter around the ulcerated surfaces.
- 24 Knee-Joint, exhibiting a peculiar change of structure in the synovial membrane. The capsule has been extensively opened and raised for the purpose of exposing the cavity of the joint. The internal surface of the synovial membrane is granulated. The membrane has everywhere become very thick, especially so at the upper and front part of the joint, where its thickness is not less than two inches. The substance of the thickened synovial membrane is so firm, as to be almost of a gristly texture. That part of the membrane opposed to the articular cartilage of the femur, was adherent to it. The whole of the soft parts exterior to the capsule have been carefully removed, so that nothing else but the capsule is left around the joint.
- 25 Portion of the Spine, with Curvature. The disease is situated in the dorsal vertebræ: it consists in a change of structure and ulceration of their bodies. A soft caseous matter is deposited around the diseased bone. This deposit is so abundant in front, and at the side of the spine, as to elevate the pleura costalis in the form of a tumor within the chest. A small piece of bone is separated from the rest by ulceration, and imbedded in the caseous matter. The medulla spinalis, for the space of an inch and a half, is greatly compressed in the situation of the curvature.
- 26 Portion of the Spine, exhibiting disease in three of the bodies of the dorsal vertebræ, which is in progress towards its cure. The disease consists in an alteration of colour in the bones, which still preserve their natural hardness. The diseased bone is in progress of removal by absorption; the upper and lower vertebræ are approximating and beginning to be ankylosed by bony matter deposited upon their anterior parts. The medulla spinalis has not suffered pressure.

- 27 Portion of the Spine exhibiting a softened and crumbled state of two of the bodies of the dorsal vertebræ, with absorption of the intervertebral substance. There is a deposition of caseous matter around the diseased bone, which, by its accumulation, has elevated the pleura costalis to a considerable extent.
- 28 Portion of the Spine, exhibiting the process of cure after the formation of Curvature from disease. The bodies of four vertebræ are destroyed, and there is a firm anchylosis of the vertebræ which are immediately above and below the situation of the disease.
- 29 Portion of the Spine exhibiting a deficiency of the medullary secretion into the cancellous texture of the bodies of the vertebræ, with ulceration commencing in their internal and posterior parts. The bones are of their natural hardness. All the other vertebræ of this spine were similarly altered.
- 30 Portion of the Spine exhibiting disease in the bodies of the second and third cervical vertebræ. The bone is softened, and of a yellow colour. The odontoid process, in consequence of its diseased condition, has completely separated at its base from the rest of the bone.
- 31 Portion of the Spine exhibiting disease in the dorsal and lumbar vertebræ. The disease consists in an alteration of colour in the bone, apparently from morbid secretion into the cancelli. Between two of the vertebræ, the intervertebral substance is completely destroyed.
- 32 Portion of the spine, in which the bodies of two of the dorsal vertebræ are altered in structure and in progress of ulceration. A portion of the diseased bone has become separated, and is protruded forwards. The intervertebral substance between the two diseased vertebræ is completely absorbed. An abscess has formed close to the side of the spine; it has no communication with the diseased bone.
- 33 Portion of the Spine exhibiting ulceration in the back parts or rings of the vertebræ. A portion of the ulcerated bone has become separated, and has pressed upon the medulla spinalis. The bones are of their natural texture.
- 34 Portion of the Spine exhibiting the process of restoration completed after extensive disease. Twelve spinous processes, and the bodies of only four vertebræ, are to be seen in the preparation; eight bodies, therefore, have been destroyed. The upper and lower vertebræ have anchylosed. The medulla spinalis has suffered no pressure; it has accommodated itself to the alteration in the direction of the canal containing it.

- 35 Portion of the Spine exhibiting ulceration of the anterior and posterior surfaces of the bodies of the cervical vertebræ.
- 36 Portion of the Spine exhibiting ulceration, with depositions of bone upon the anterior surfaces of the bodies of the vertebræ.
- 37 Portion of the Occipital bone, with the three uppermost Cervical Vertebræ. The occipital bone and the atlas are firmly anchylosed. The second and third vertebræ are also anchylosed. The odontoid process and the body of the second vertebra are changed in structure, and in part removed by ulceration.
- 38 Soft Substances which have been removed from the sheaths of Tendons. Most of them are smooth, flattened, and rounded at their edges.
- 39 A Cartilage which was removed from the interior of the capsule of the Knee-Joint. Bone is deposited in the centre of the cartilage.
- 40 Sections of a Cartilage which was removed from the interior of the capsule of the Knee-Joint. Specks of bone are deposited in the centre of the cartilage.
- 41 Basis of the Skull, exhibiting disease in one of the articulations with the lower jaw. Ulceration commencing in the articular surface of the glenoid cavity has extended deeply into the surrounding bone; and around the ulcerated surface, new osseous matter is deposited.
- 42 Portion of the Occipital Bone, with the Atlas. The atlas is anchylosed to the occipital bone, and is displaced to one side, so that its lateral part projecting within the foramen magnum, considerably diminishes the size of the aperture.
- 43 Second and Third Cervical Vertebræ firmly united by bone. Part of the odontoid process has been destroyed by ulceration.
- 44 Second and Third Cervical Vertebræ, exhibiting a bony union of their bodies, articular surfaces, and spinous processes.
- It is uncertain whether this was the effect of accident or disease.
- 45 Spine from a young subject, exhibiting a complete destruction of the intervertebral substance, in the whole extent of the column, with ulceration of the bodies of the vertebræ. The bodies of several of the lumbar vertebræ are completely destroyed, and an angle is here formed by the approximation of the upper and lower parts of the column and the projection of the spinous processes. The bone in progress of ulceration is not softened, or otherwise changed in its texture.

DISEASES OF JOINTS CONTINUED.

SPECIMENS NOT CONTAINED IN BOTTLES.

- | | |
|-------|---|
| G. 1 | Hip-Joint, exhibiting anchylosis of the head of the femur with the ilium above the acetabulum. The acetabulum is filled by bony matter. |
| G. 2 | Hip-Joint, exhibiting anchylosis of the head of the femur with the ilium. The acetabulum is contracted and there is bony matter deposited in it. |
| G. 3 | Hip-Joint, exhibiting ulceration of the head and neck of the femur, and of the brim of the acetabulum. |
| G. 4 | Hip-Joint, exhibiting anchylosis of the head of the femur to the ischium immediately behind the acetabulum. |
| G. 5 | Hip-Joint. The head of the femur rests partly in the acetabulum and partly upon the ilium; and in this situation it has become anchylosed. |
| G. 6 | Hip-Joint, exhibiting anchylosis of the head of the femur to the ilium on the outer side of the acetabulum. A distinct portion of bone extends transversely between the trochanter major and the tuberosity of the ischium. |
| G. 7 | Hip-Joint. The depth of the acetabulum is considerably increased by absorption. The articular surface of the femur is in part removed by absorption, and there is a considerable deposition of osseous matter around the neck of the bone. |
| G. 8 | Hip-Joint, in which there has been absorption of the brim of the acetabulum and of the head of the femur.
<div style="text-align: center; padding: 5px 0;">Presented by Richard Partridge, esq.</div> |
| G. 9 | Hip-Joint, in which there has been absorption of the brim of the acetabulum, also of the head and neck of the femur. Osseous deposition has taken place around the neck of the femur, and around the acetabulum. The surfaces of the femur and of the os innominatum, which were in contact, have become adapted so as to form a new joint. |
| G. 10 | Hip-Joint, in which there has been absorption of the brim of the acetabulum, also of the head and neck of the femur. New bone is deposited upon the shaft of the femur, and there is necrosis of the tuberosity of the ischium, which is in progress of separation. |

- G. 11 Hip-Joint, in which the articular surfaces of the acetabulum and of the head of the femur have become finely polished, and of an ivory-like texture. Osseous deposition has taken place around the neck of the femur.
- G. 12 Hip-Joint, in which there has been absorption of the acetabulum and of the head of the femur. The surfaces of bone which were in contact and have moved freely upon each other, have acquired a fine polish and an ivory-like texture.
- G. 13 Portion of a Femur exhibiting absorption of the articular surface of the head, with a considerable osseous deposition around the neck of the bone.
- G. 14 Hip-Joint, from a young subject. There has been absorption of the brim of the acetabulum, with complete absorption of the head, neck, and part of the shaft of the femur.
- G. 15 Hip-Joint, in which there has been absorption of the acetabulum, with osseous deposition around it, and absorption of the head of the femur.
- G. 16 Hip-Joint, in which the depth of the acetabulum is increased by the deposition of osseous matter around its margin. There is also absorption of the head of the femur with osseous deposition around its neck.
- G. 17 Portion of a Femur exhibiting absorption of the head, with osseous deposition around its neck.
- G. 18 Os Innominatum, in which there has been absorption of the acetabulum to the extent of forming a communication between its cavity and the interior of the pelvis.
- G. 19 Portion of a Femur in which there has been complete absorption of the head and neck of the bone.
- G. 20 Portion of a Femur exhibiting a change in the form of the head of the bone. Its upper surface is flattened, and its width is considerably increased.
- G. 21 Portion of a Femur in which the neck of the bone seems to have yielded from its softened condition, so as to permit the head to be nearly in contact with the posterior part of the trochanter major.
- G. 22 Os Innominatum and Sacrum exhibiting ankylosis of the sacro-iliac symphysis.
- G. 23 Os Innominatum and Sacrum exhibiting ankylosis of the sacro-iliac symphysis.
- G. 24 Sacrum and Coccyx ankylosed.
- G. 25 Knee-Joint, in which disease seems to have commenced in the head of the tibia, this part of the bone being altered in structure, and in progress of ulceration. There is ankylosis of the patella to the femur, and of the condyles of the femur to the tibia.

- G. 26 Knee-Joint, exhibiting ulceration of the articular surfaces of the Femur and Tibia.
- G. 27 Knee-Joint, exhibiting ankylosis of the inner condyle of the femur to the articular surface of the tibia. The bones contain much less than their usual proportion of earthy matter.
- G. 28 Knee-Joint, from a young subject, exhibiting ulceration of the cancellous texture of the femur extending through the epiphysis to the articular surface.
- G. 29 Knee-Joint, exhibiting a spongy state of the bones with partial ulceration of them. What remains of the patella is ankylosed to the femur, and the condyles of the femur are ankylosed to the head of the tibia.
- G. 30 The lower end of a Femur exhibiting ulceration of the cancellous texture, just above the condyles, with thickening of the surrounding bone.
- G. 31 Knee-Joint, exhibiting deep ulceration of the articular surfaces of the femur and head of the tibia. The bones contain less than their usual proportion of earthy matter.
- G. 32 Elbow-Joint, in which there is ankylosis of the articular surfaces, with considerable osseous deposition upon the surrounding bone.
- G. 33 Sections of an Elbow-Joint in which there is ankylosis of the humerus to the ulna, with complete destruction of the articular surfaces.
- G. 34 Shoulder-Joint, in which the glenoid cavity and head of the humerus have been entirely removed by ulceration.
- G. 35 Two Shoulder-Joints from the same individual. In each joint there has been ulceration of the articular surfaces of the head of the humerus and glenoid cavity. The surfaces of the humerus and scapula, which have been in contact, have acquired an ivory-like texture.
- G. 36 Bones of a Finger. There is ankylosis of the bones of the first and second phalanx.
- G. 37 Carpus, in which there is complete ankylosis of the several articular surfaces.
- G. 38 Bones of the Great Toe exhibiting ulceration of their articular surfaces, with surrounding depositions of osseous matter.
- G. 39 Carpus, with two of the Metacarpal Bones. There is ankylosis of the metacarpal bones with the carpus, and of the several carpal bones with each other.
- G. 40 Portions of the Radius and Ulna. There has been ulceration of their contiguous sides, just above their lower ends. The ulcerated surfaces have become adapted to each other so as to form a new joint, permitting the free movement of the radius upon the ulna.

- G. 41 Basis of the Skull and the Atlas. The atlas is ankylosed to the occipital bone, and is displaced forwards and to one side, so that its posterior part projecting within the foramen magnum, considerably diminishes the size of the aperture.

It is uncertain whether these changes were the effect of accident or disease.

- G. 42 Four Dorsal Vertebrae and three Ribs. The vertebrae are united by portions of bone extending between the anterior surfaces of their bodies. The heads of the ribs are united to the vertebrae by bone.
- G. 43 Two Lumbar Vertebrae which are extensively united by osseous matter deposited upon the anterior surfaces of their bodies.
- G. 44 Section of the Spine in which there has been destruction by disease of the bodies of six of the dorsal and lumbar vertebrae. There is a firm bony union of the vertebrae above and below the seat of the disease. The canal which contained the medulla spinalis is simply altered in its direction without a lessening of its diameter.
- G. 45 Three Dorsal Vertebrae united by portions of bone extending between the anterior surfaces of their bodies.
- G. 46 Portion of the Spine exhibiting the effects of disease in the bodies of the dorsal vertebrae. The bodies of two of these vertebrae are completely destroyed, and two others are in progress of removal.
- G. 47 Portion of the Spine exhibiting disease in the bodies of the dorsal and lumbar vertebrae. Two vertebrae are destroyed, and three others are in progress of removal. The diseased bone is rough and porous, but retains its natural firmness.
- G. 48 Portion of the Spine exhibiting a lateral curve of the dorsal and lumbar vertebrae. The aorta and the vena azygos have been injected to shew the change in their direction, corresponding with the altered form of the spine.
- G. 49 Spine, Thorax, and Pelvis, from a female. There is a lateral curve of the dorsal and lumbar portions of the spine. The thorax projecting anteriorly, is very much flattened at its sides. The cavity of the pelvis preserves its natural dimensions.
- G. 50 Spine, Thorax, and Pelvis. The spine, in its dorsal region, is curved with the convexity backwards. The thorax projecting anteriorly, is flattened at its sides. The pelvis is unaltered.
- G. 51 Spine, from an aged subject, which, in its whole extent, is curved with the convexity backwards.
- G. 52 Spine and Pelvis from a young subject. The spine exhibits three distinct lateral curves. The cavity of the pelvis, at its inferior aperture, is diminished to the extent that a space of only half an inch intervenes between the tuberosities of the ischia.

- G. 53 Spine, which in the upper part of its dorsal region, is curved laterally and backwards.
- G. 54 Spine and Sacrum. The spine presents three lateral curves.
- G. 55 Spine and Pelvis. The spine presents three lateral curves. The pelvis is unaltered.
- G. 56 Spine with Portions of the Ribs. The spine presents two lateral curves in its dorsal region.
- G. 57 Spine and Pelvis. The spine presents three lateral curves. The pelvis is unaltered.
- G. 58 Spine, Thorax, and Pelvis. The spine presents two deep lateral curves in its dorsal and lumbar regions. The thorax and pelvis are unaltered.
- G. 59 Spine with Portions of the Ribs. The spine presents three lateral curves. The aorta is preserved, to shew its adaptation to the altered form of the spine.
- G. 60 Portion of a Spine in which an angle has formed in its dorsal region, in consequence of destruction of the bodies of the vertebræ. The aorta, upon the altered part of the spine, forms two very acute angles.
- G. 61 Portion of a Spine in which an angle has formed in its dorsal region in consequence of destruction of the bodies of the vertebræ. The aorta, upon the altered part of the spine, forms a very acute angle.
- G. 62 Spine, in which a very acute angle has formed, in consequence of the destruction of the bodies of the six lower dorsal vertebræ.
- G. 63 Spine, Thorax, and Pelvis. There has been ulceration of the bodies of the lumbar vertebræ, and of the sacrum in its whole extent. Four of the bodies of the lumbar vertebræ are destroyed, and an angle is formed by the approximation of the vertebræ above and below the situation of the disease. The thorax is depressed anteriorly to the extent that a space of only two inches and a half intervenes between the ensiform cartilage and the ossa pubis.
- G. 64 Sacrum and the Fifth Lumbar Vertebra. Their articular processes are firmly and extensively ankylosed.

THIRD SERIES.

INJURIES OF BONES AND JOINTS.

- 1 Portion of a Spine in which there is fracture of a dorsal vertebra, with displacement of the fractured surfaces, and a complete division of the medulla spinalis by a portion of bone projecting into the canal.
- 2 Portion of a Spine in which the articular processes of the fifth and sixth cervical vertebræ are dislocated, and one of the articular processes of the sixth with its body, is broken. The medulla spinalis has been divided along its middle for the purpose of shewing, that opposite to the injured vertebræ, its substance is very much softened and in part lacerated.
- 3 Portion of a Spine in which there is dislocation of the articular processes of the fourth and fifth cervical vertebræ, with fracture of the edge of one of these processes, and a separation of the intervertebral substance uniting the body of the fifth to the contiguous vertebræ.
- 4 Portion of the Occipital Bone with the first and second Cervical Vertebræ. There is complete ankylosis of the first and second vertebræ, with fracture extending through the anterior part of the first vertebra.
- 5 Portion of a Spine in which there is dislocation, with fracture of the edges of the articular processes of the sixth and seventh cervical vertebræ. The body of the sixth cervical vertebra is separated from its fibro-cartilage, and projects in front of the seventh.
- 6 Portion of a Spine in which there is fracture of the arches and bodies of the fifth, sixth, seventh cervical, and first dorsal vertebræ.
- 7 Portion of a Spine in which there is fracture of the posterior part of the atlas.
- 8 Portion of a Spine in which there is complete dislocation of the bodies and articular processes of the fifth and sixth cervical vertebræ, without any fracture.

- 9 Portion of a Spine in which there is dislocation of the bodies and articular processes of the fourth and fifth cervical vertebræ, with fracture of the body and arch of the fifth. The body of the fourth vertebra projects in front of the fifth. It is necessary to observe that the fissures upon the arches of the vertebræ, on each side of the spinous processes, were made by the saw, in opening the spinal canal.
- 10 Portion of a Spine in which there is dislocation of the articular processes and bodies of the fifth and sixth cervical vertebræ, with fracture of the articular process of the fifth.
- 11 Portion of a Spine in which there is complete ankylosis of the second and third cervical vertebræ without any change in the structure of the bones.
- 12 Portion of a Spine in which there is dislocation of the bodies and articular processes of the fifth and sixth cervical vertebræ, with fracture of the body of the sixth.
- 13 Portion of a Spine in which there is dislocation of the bodies and articular processes of the fourth and fifth cervical vertebræ without any fracture.

Case described by Mr. Lawrence. *Medico-Chirurgical Transactions*, vol. xiii. p. 394.
- 14 Shoulder-Joint, exhibiting partial absorption of the head of the humerus and glenoid cavity. The surfaces of the scapula and humerus which have been in contact are adapted to each other, and are covered by cartilaginous substance, so as to form a new joint.
- 15 Portion of a Humerus in which fracture occurred many years before death. The ends of the bone not having united, have become accurately adapted to each other, and have acquired a polished surface.
- 16 Portion of a Humerus in which fracture occurred many years before death. The ends of the bone are covered by cartilaginous substance, and they are connected by a distinct membranous capsule, which is smooth upon its internal surface.
- 17 Section of the Cartilage of a Rib which appears to have been fractured and reunited by the growth of new cartilaginous substance.
- 18 Elbow-Joint, in which there is fracture and dislocation. The radius and ulna are broken about two inches below the joint. The head of the radius is dislocated upwards in front of the humerus. The fractured ends of the radius and ulna not having united by bone, are connected by new capsules, which have formed around them.
- 19 Elbow-Joint, exhibiting a transverse fracture of the olecranon extending into the cavity of the joint. A portion of quill is passed between the fractured surfaces.

- 20 Portion of a Femur exhibiting fracture of recent occurrence in that part of its neck which is covered by synovial membrane. Upon one half of the circumference of the neck of the bone, the periosteal and synovial coverings are torn. Upon the other half, they are uninjured.
- 21 Hip-Joint, exhibiting fracture of recent occurrence in that part of the neck of the femur which is covered by synovial membrane. A portion of the capsule is detached and turned downwards to shew that it is thickened by the deposition of lymph upon its internal surface.
- 22 Os Calcis, exhibiting fracture extending transversely through its posterior part, which was believed to have been occasioned by the action of the muscles attached to it.
- 23 Portion of a Femur exhibiting fracture of its neck and of the trochanter major, which occurred six weeks before death. The direction of the fracture is still evident, it extended transversely across the basis of the neck, and through the root of the trochanter major, so as to detach this process from the rest of the bone. The head and neck are forced downwards between the trochanter major and minor. The several parts of the bone thus brought into contact are united so firmly that they could not be moved upon each other.
- 24 Portion of a Femur in which there has been fracture of the neck and upper part of the shaft. The fracture extended through the basis of the neck; it also extended through the basis of the trochanter major and minor so as to separate these processes from the rest of the bone. The fractured surfaces are firmly united.
- 25 Portion of a Femur in which there has been fracture through the basis of its neck. The fractured end of the neck has been forced into the shaft of the bone between the trochanters, in which situation it has firmly united.
- 26 Elbow-Joint, in which there is dislocation of the head of the radius backwards. No reduction of the dislocated bone having been effected, it has become extensively united to the side of the ulna.
- 27 Portion of a Femur exhibiting fracture of its neck and shaft. Two distinct lines of fracture may be traced, one across the basis of the neck, the other through the shaft at some distance below the trochanter major, and through the trochanter minor.
- 28 Portion of a Femur exhibiting fracture of its neck and shaft. The fracture runs perpendicularly through the basis of the neck; it is also continued for a considerable extent down the shaft. The trochanter minor is also separated. The fractured surfaces have united in these situations where they have been in apposition.
- 29 Portion of a Femur in which there is fracture of its neck and shaft. The fracture runs obliquely through the basis of the neck; it also extends in several directions into the shaft.
- 30 Portion of a Femur exhibiting fracture of its neck, which occurred many years before death. There has been complete absorption of the neck of the bone. The surfaces of the head and of the shaft which have been in contact are very smooth and of an ivory-like texture.

- 31 Portion of a Femur exhibiting fracture in that part of its neck which is covered by synovial membrane. The direction of the fracture is such that the surface of the bone exhibits, on the one side, an eminence, and on the other, a corresponding cavity. The periosteum and the synovial membrane covering the neck are torn only in one half of its circumference. Upon the other half, the membranes are entire, and still connect the two parts of the bone.
- 32 Hip-Joint, exhibiting fracture of the neck of the Femur, which occurred many years before death. The neck of the bone is absorbed. Bristles are passed beneath three thick fibrous bands which extend from the head of the bone to the capsule. The capsule is generally thickened by a deposition of lymph upon its internal surface.
- 33 Hip-Joint, in which a dislocation of the head of the Femur upon the ischiatic notch occurred about three weeks before death. The ligamentum teres has been torn across its middle; no union of it has taken place. The cartilage covering the head of the bone is in part absorbed. The opening in the capsule through which the head of the bone escaped was situated at the posterior part of the joint. Only a small part of this opening is visible, the larger part of it being closed by the union of the torn edges of the capsule.
- 34 Sections of the Head and Neck of the Femur, from an aged female. On the surface of each section, a white line is visible, giving the appearance of a fracture which has united.
- 35 Sections of the Head and Neck of the Femur. On the surface of each section, a white line is visible, giving the appearance of a fracture which has united.
- The two preceding specimens are taken from the same individual.
- 36 Hip-Joint, exhibiting fracture of the neck of the Femur. The fracture extends transversely across the base of the neck. The capsule is much thickened.
- 37 Hip-Joint, exhibiting dislocation of the head of the Femur with elongation of the capsule. The capsule, which was entire, has been laid open to shew that the head and neck of the femur are still contained within it. The cavity of the acetabulum has almost disappeared. The ligamentum teres is destroyed, and a small portion of the head of the bone has been absorbed.
- 38 Hip-Joint, exhibiting dislocation of the head of the Femur, of recent occurrence. The ligamentum teres is detached from the head of the bone. The capsule is extensively lacerated at the inner side and lower part of the joint. The obturator internus muscle is extensively lacerated.
- 39 Patella, exhibiting a separate piece of bone connected with its lateral border.

It is not known whether this was the result of malformation or of accident.

- 40 Portion of a Skull exhibiting a fracture in the orbital plate of the frontal bone, which was occasioned by the passage of an iron rod through the orbit into the brain.
- 41 Two Patellæ from the same individual. Both bones have been fractured transversely. The fractured portions having separated to a considerable distance from each other, are connected only by a thin membranous substance.
- 42 Section of a Patella which has been fractured into three pieces. They are united by a thick ligamentous substance.
- 43 Section of a Patella in which there has been a transverse fracture. The fractured surfaces are united by a thick portion of ligament about an inch in extent.
- 44 Hip-Joint, exhibiting dislocation of the head of the Femur, which occurred a considerable time before death. On one side of the preparation is a part of the original capsule; this has been divided extensively to shew the acetabulum, which is contracted into a narrow cavity. On the other side of the preparation is the head of the bone surrounded by a thick membrane, which is smooth on its internal surface. This membrane, now forming the capsule of the joint, is in part newly formed, and in part consists of the remains of the former capsule: it is extensively divided to give a distinct view of the head of the bone. A portion of quill is passed beneath the neck of the bone to shew the continuity between the new capsule, and that part of the old capsule which is attached to the circumference of the acetabulum.
- 45 Portion of the Femur exhibiting fracture extending obliquely through the basis of its neck in a line which is marked by bristles. In this instance, the synovial and periosteal coverings of the neck of the bone are uninjured, and there is, in consequence, no separation of the fractured surfaces.
- Case described by Mr. Stanley. Medico-Chirurgical Transactions, vol. xiii. p. 510.
- 46 Elbow-Joint, exhibiting dislocation of the radius and ulna backwards, which occurred a considerable time before death. The articular surface of the humerus was completely covered by a newly formed capsule into which an incision has been made. The head of the radius and the articular surface of the ulna are also covered by new capsules. The head of the radius is confined in the place which it now occupies by a fibrous cord extending from it to the humerus.
- 47 Knee-Joint, exhibiting the consequences of a fracture in the lower part of the Femur. The fracture extended transversely through the shaft a little above the condyles, and downwards between the condyles into the joint. The upper end of the bone is forced downwards by the side of the patella, and it protruded through the integuments. In this situation it has become firmly fixed by bony matter deposited from the contiguous surfaces of the periosteum. The protruding end of the femur perished, and its separation from the living bone has commenced. The articular surfaces of the knee-joint have become anchylosed.

- 48 The Scapular end of a Clavicle exhibiting a portion of bone united to it by a distinct joint.
It is uncertain whether this had been separated by fracture.
- 49 Portion of a Scapula exhibiting fracture of the acromion, which has united by soft fibrous matter.
- 50 Portion of a Sternum fractured upon its internal surface by a bullet, which has become firmly imbedded in the substance of the bone.
- 51 Portion of Skull in which fracture occurred many years before death. Some portions of bone insulated by the fracture were removed at the time of the accident. Other portions were left, and have re-united by osseous matter.
- 52 Wrist-Joint, exhibiting dislocation of the carpal ends of the radius and ulna backwards.
- 53 Portion of a Femur exhibiting fracture in the basis of its neck, which occurred about five months before death. The periosteal and synovial coverings are torn only upon the posterior side of the neck of the bone; upon its anterior side, they are uninjured.
Case described by Mr. Stanley. *Medico-Chirurgical Transactions*, vol. xiii. p. 508.
- 54 Radius and Ulna which were fractured a considerable time before death. The overlapping ends of the bones are united only by cellular tissue. They have been in part separated to shew the mode of their union.
- 55 The Upper Portion of a Humerus with the tendon of the long head of the biceps muscle. The tendon has slipped from its groove and is confined to the adjacent part of the humerus by a membranous sheath, apparently formed by condensed cellular tissue. The tendon was attached to the glenoid cavity in its usual situation.
- 56 Shoulder-Joint, exhibiting dislocation of the humerus which occurred eighteen months before death. The head of the humerus rests against the inferior border of the scapula. The tendons of the supra-spinatus, infra-spinatus, teres minor, and subscapularis muscles are entire. A bristle is passed beneath the tendon of the latter close to its insertion. A bristle is passed beneath the tendon of the long head of the biceps which retains its attachment to the edge of the glenoid cavity. Two bristles are passed beneath the circumflex nerve which has been compressed by the head of the humerus. The nerve is, in consequence, flattened, and is firmly adherent to the capsule of the joint.
- 57 Hip-Joint, exhibiting dislocation of the Femur which occurred many years before death. The head of the femur has been thrown upwards and forwards, and is lodged in a new bony cavity

formed at the margin of the ilium in the situation of the anterior inferior spine. The ligamentum teres is still attached to the head of the bone, and bristles are passed beneath the two portions of this ligament which retain their attachments to the margin of the original acetabulum.

- 58 The lower extremities of a Tibia and Fibula. A fracture, which was of recent occurrence, extends through the tibia to its articular surface. The communication of this fracture with the ankle-joint is closed by a layer of lymph firmly adhering to the articular cartilage of the tibia.

- 59 Sections of the Head, Neck, and part of the Shaft of a Femur. The neck of the bone is considerably shortened, and there is irregular osseous deposition upon its external surface.

It is uncertain whether these changes were consequent on injury.

- 60 Portion of a Humerus exhibiting distinct fractures extending through its condyles into the elbow-joint. The fractured surfaces are united by ligamentous matter.

- 61 Shoulder-Joint with the Shaft of the Humerus, exhibiting dislocation and fracture. The head of the humerus is thrown forwards beneath the coracoid process. The tendon of the long head of the biceps is entire. The tendons of the supra-spinatus, infra-spinatus, teres minor, and subscapularis muscles are also entire. There have been two fractures in the shaft of the bone, and they are both firmly united.

The injury consisted, in the first instance, of the dislocation and a single fracture. No attempt was made to reduce the dislocation, and when the fracture had united, the patient fell down, and the second fracture then occurred.

- 62 Section of the Cartilage of a Rib which has been fractured and is firmly united. The uniting medium consists of cartilage and of bone.

- 63 Portion of a Femur exhibiting fracture of its neck which occurred many years before death. The neck of the bone is absorbed, and the fractured surface of the head has become firmly united to the capsule, by a broad band of fibrous substance.

- 64 Portion of a Femur exhibiting fracture of its neck. Bristles are introduced between the fractured surfaces, and it will be observed that the attachment of the capsule to the bone is entirely beyond the line of the fracture. The neck of the bone is partly absorbed, and the union of the fractured surfaces, although not yet complete, is by osseous matter.

The individual from whom this specimen was taken was eighteen years of age, and he died two months after the occurrence of the injury.

- 65 Knee-Joint from a young subject, exhibiting an oblique fracture of the Femur just above the condyles. The upper portion of the femur, crossing the lower portion obliquely, has become united by osseous substance to the back part of the outer condyle. The extremity of the upper portion of the femur protruding through the skin was removed during life by the saw. Inflammation extending to the knee-joint has produced absorption of the articular cartilages and adhesion of the opposite parts of the joint to each other. At the bottom of the bottle is the piece of bone which was removed by the saw.

INJURIES OF BONES AND JOINTS CONTINUED.

SPECIMENS NOT CONTAINED IN BOTTLES.

- | | |
|-------|---|
| H. 1 | Tibia and Fibula. The tibia has been fractured in its middle, and the fibula near its upper end. The fractured ends of the tibia have overlapped. Both fractures are firmly united. |
| H. 2 | Tibia, Fibula, and Astragalus. The tibia has been fractured near its middle. The upper portion of the bone is considerably displaced. The fracture has firmly united. The tibia is ankylosed to the fibula and to the astragalus. |
| H. 3 | Tibia and Fibula. The tibia has been fractured about one third from its lower end, and the fibula near to its upper end. Both fractures have firmly united. |
| H. 4 | Femur, which has been fractured about one third from its upper extremity. The fractured ends overlap considerably, the upper portion lying in front of the lower. The fracture has firmly united. |
| H. 5 | Femur, which has been fractured in the middle of its shaft. The two portions overlap to the extent of between four and five inches, the upper portion lying in front of the lower. |
| H. 6 | Femur, which has been fractured immediately above the trochanter minor. The upper portion is considerably displaced. The fracture has firmly united. |
| H. 7 | Femur, which has been fractured in the middle of its shaft. The two portions overlap considerably, the upper portion lying on the inner side of the lower. The fracture has firmly united. |
| H. 8 | Femur, which has been fractured in two places by a wheel passing over the limb. One fracture is about one third from its upper end, and the other at the same distance from its lower end. |
| H. 9 | Portion of a Femur which has been fractured transversely through the middle of its shaft, and there is an extension of the fracture downwards through the internal condyle. |
| H. 10 | Portion of a Femur which has been fractured through the trochanter major and upper part of the shaft. The fracture extends obliquely through the shaft to the extent of five inches. The fractured surfaces, not in contact, have united by portions of bone extended between them. |

- H. 11 Portion of a Femur which has been fractured about two inches below the trochanter minor. Both portions of bone have been displaced so that a considerable angle, projecting forwards, is formed at the point of their union.
- H. 12 Portion of a Femur which has been fractured in its lower part. The fracture extends transversely through the shaft and obliquely between the condyles into the knee-joint.
- H. 13 Portion of a Femur fractured in its lower part. The fracture extends transversely through the shaft a little above the condyles, and downwards between the condyles into the knee-joint.
- H. 14 Portion of a Femur fractured transversely just above the condyles. From inflammation in the knee-joint, there has been ulceration of the articular surfaces of the condyles of the femur and head of the tibia.
- H. 15 Portion of a Femur fractured in its lower part. The fracture extends transversely through the shaft a little above the condyles, and is continued downwards between the condyles into the knee-joint.
- H. 16 Sections of a Femur which has been fractured about four inches below its upper end. The fracture has firmly united with but little displacement of the ends of the bone.
- H. 17 Portions of a Tibia and Fibula with the Astragalus. There has been fracture of the fibula about three inches above the malleolus, and of the tibia in the same situation. The fracture of the tibia extends downwards into the ankle-joint. The tibia and fibula are joined by bone to the astragalus.
- H. 18 Portions of a Tibia and Fibula. The tibia has been broken obliquely about three inches above the ankle, and the fibula in the same situation. The fractures have firmly united.
- H. 19 Section of a Femur which has been broken about the centre of its shaft. The two portions have overlapped considerably, and have united in this situation. The osseous matter forming the medium of their union has a cancellous texture. The medullary cavity is closed at both the fractured ends of the bone.
- H. 20 Section of a Femur which has been broken about the centre of its shaft. The fracture has united, and the appearances are the same as in the preceding specimen.
- H. 21 Sections of a Tibia and Fibula. There has been a compound fracture of both bones about two inches above the ankle. There is a vacancy in the tibia in the situation of the fracture, at the bottom of which there is a piece of dead bone not yet separated. The upper and lower portions of the tibia have not approximated, but there is a firm and extensive union of the tibia to the fibula.

- H. 22 Portions of a Tibia and Fibula. There is fracture of the tibia about two inches above the ankle, and the fracture extends downwards in two directions into the ankle-joint. The fibula is fractured about four inches above the ankle.
- H. 23 Two Ribs which have been fractured. In one rib the fracture occurred near its middle, and in the other near its angle. There has been no displacement of the ends of the bones, and the fractures have firmly united.
- H. 24 Humerus, which has been fractured in several directions just above the condyles. The fractures have firmly united.
- H. 25 Sections of a Humerus which has been fractured obliquely through the middle of its shaft.
- H. 26 Portion of a Humerus in which there has been fracture of the upper part of the shaft extending to its head.
- H. 27 Scapula and Humerus. The glenoid cavity is altered in form, and there appears to have been a fracture through its centre. The head of the humerus is adapted to the altered glenoid cavity.
- H. 28 Scapula, in which there has been a transverse fracture of the acromion which has not united. It may be inferred from the appearance of the bone that the fracture occurred a considerable time before death.
- H. 29 Radius and Ulna which have been fractured near their upper ends. A considerable osseous deposition has taken place between the fractured surfaces and around them.
- H. 30 Radius, which has been fractured about its middle. The fracture has united with a little overlapping of the ends of the bone.
- H. 31 Radius and Ulna. The radius has been broken about an inch above its lower end. The fracture has united with the lower portion of bone considerably in front of the upper. The head of the ulna is altered in form, but it is uncertain whether this was from fracture.
- H. 32 Clavicle, which has been broken in its centre. The fracture has united with the scapular end of the bone beneath its sternal end.
- H. 33 Scapula, which has been broken transversely a little below the spine, also through the acromion. Both fractures have united.
- H. 34 Scapula and a portion of the Humerus. The glenoid cavity is greatly altered in its form

and the head of the humerus is adapted to it.

It is uncertain whether these appearances were the result of injury or disease.

- H. 35 Portion of a Radius which has been fractured about an inch above its lower end. The fracture has united with a considerable overlapping of the ends of the bone.
- H. 36 Elbow-Joint. The humerus has been fractured between the condyles, and transversely, a little above them. The articular surface of the ulna is adapted to the altered form of the humerus. It is uncertain whether the ulna has been broken
- H. 37 Elbow-Joint. The articular surfaces of the humerus and ulna are altered in form, but it is uncertain whether there has been fracture. The radius was found dislocated from the outer condyle, and lying upon the front of the ulna.
- H. 38 Elbow-Joint. A fracture extends in two directions through the internal condyle into the elbow-joint. The two portions of the condyle separated by the fracture have not re-united.
- H. 39 Portions of a Tibia and Fibula. The point of the malleolus internus has been separated by fracture. The fibula is broken two inches above its lower end.
- H. 40 Os Innominatum. A fracture extends through the acetabulum, splitting it into four portions. A fracture also extends through the body and ramus of the pubes; through the ischium between its spine and tuberosity, and through the ilium to its crista.
- H. 41 Os Innominatum. A fracture extends in two directions through the acetabulum. A portion of the acetabulum on its outer side being separated, permitted the head of the femur to pass upwards upon the dorsum of the ilium.
- H. 42 Pelvis and portion of the Thigh Bone, from the same individual. There is a complete separation of both sacro-iliac symphyses, and of the symphysis pubis. The condyles have separated from the shaft of the femur at the line of their cartilaginous union in the young subject.
- From an individual aged fourteen. The result of external violence.
- H. 43 Skull-Cap, in which fracture with depression of bone occurred many years before death. The fracture is united, and the depression still remains.
- H. 44 Skull, in which there have been two fractures, each about an inch and a half in extent, one in the frontal, and the other in the parietal bone. They have both united.

These fractures appear to have been produced by a cutting instrument.

- H. 45 Skull-Cap, in which there has been extensive fracture of the frontal and parietal bones, which has firmly united.
- H. 46 Sternum, fractured transversely through its second bone.
- H. 47 Sternum, fractured transversely through its second bone.
- H. 48 Sections of a Femur in which there is fracture of the shaft an inch below the trochanter minor. The fractured ends overlap considerably, the lower end being drawn upwards in front of the upper. A moderately firm union has taken place between the surfaces of bone which are in contact.
From a female aged sixty-seven, who died five weeks after the occurrence of the injury.
- H. 49 Portion of a Femur in which there has been fracture extending through the basis of its neck and through the trochanter major. The fractured surfaces have firmly united, with a descent of the neck of the bone considerably below its natural situation.
- H. 50 Portion of a Femur exhibiting fracture of its neck, of which no union has taken place. The neck of the bone is almost completely absorbed. Depositions of osseous matter have taken place upon the head of the bone.
From an aged female. The fracture occurred nineteen years before death. Presented by J. H. B. Williams, esq.
- H. 51 Sections of a Femur in which there has been fracture extending through the basis of its neck, and through its shaft between the trochanters. There is firm union of the fractured surfaces, with shortening of the neck and a descent of it below its natural situation.
- H. 52 Portion of a Femur exhibiting fracture of its neck, of which there is no union. The surfaces of the head, and of the shaft, which were in contact, are smooth and very dense. Irregular osseous depositions have taken place upon the shaft around the fractured surface, and upon the head of the bone.
- H. 53 Sections of a Femur in which there has been fracture extending through the basis of its neck. There is firm union of the fractured surfaces, with the descent of the neck considerably below its natural situation.
- H. 54 Portion of a Femur in which there is fracture of the shaft immediately above the trochanter minor, and in such a direction, that the trochanter major is separated from the rest of the bone.
- H. 55 Portion of a Femur in which there is fracture extending obliquely through the neck, close to the head of the bone.

- H. 56 Section of a Femur in which there has been fracture extending through the basis of its neck into the trochanter minor. There is firm union of the fractured surfaces.
- H. 57 Sections of a Femur in which there has been fracture extending through the basis of its neck, and through the trochanter major into its shaft. There is a firm union of the fractured surfaces with the two portions of the trochanter major at some distance from each other.
- Case described by Mr. Stanley. *Medico-Chirurgical Transactions*, vol. xiii. p. 505.
- H. 58 Portion of a Spine in which there is fracture extending through the body of a dorsal vertebra.
- H. 59 Portion of a Spine in which there is fracture extending through the arches of the fourth and fifth cervical vertebræ, and through the body of the fifth.
- H. 60 Portion of a Spine in which there is fracture extending through the body of a dorsal vertebra.
- H. 61 Portion of a Humerus in which the tendon of the long head of the biceps muscle, having been separated from the glenoid cavity, has become adherent to the bone at its lesser tuberosity, close to the edge of the bicipital groove.
- H. 62 Portion of a Humerus in which the tendon of the long head of the biceps, having been separated from the glenoid cavity, has become adherent to the bone at the edge of the bicipital groove.
- H. 63 Pelvis, in which, separation of the sacro-iliac symphyses and of the symphysis pubis has taken place, sufficiently to permit the free movement of the bones against each other. The cavity of the pelvis is much smaller than natural.
- From a female aged about forty, who died in her second labour, in consequence of a rupture of the vagina and uterus.
- H. 64 Knee-Joint, exhibiting the consequences of fracture of the Femur. The fracture extended transversely through the shaft, immediately above the condyles. The upper end of the bone, protruded downwards behind the knee, has, in this situation, become firmly and extensively united to the condyles. There is a complete ankylosis of the patella to the femur, and of the condyles of the femur to the head of the tibia.

FOURTH SERIES.

DISEASES OF THE BRAIN, ITS MEMBRANES, AND BLOOD-VESSELS.

- 1 Portion of Dura-Mater, exhibiting a newly formed membrane upon its internal surface. This membrane is of considerable extent; it lines the whole of the dura mater covering the right hemisphere of the cerebrum; its thickness is about equal to that of the peritoneum, and it is very vascular throughout; it has been completely separated from the dura mater, except along one edge, where it is still adherent, and it will be observed that this edge is insensibly lost upon the dura mater, so that the internal surface of the new membrane and of the dura mater appear to be continuous. Towards its lower part, the new membrane is thicker than above, and it is here divisible into two distinct layers.
- 2 Portion of Brain with its Membranes, exhibiting the same change as the preceding. The new membrane is here seen intervening between the dura mater and tunica arachnoidea, and occupying an extent of some inches over the right hemisphere of the cerebrum; it adheres pretty firmly to the internal surface of the dura mater, and is very vascular throughout.
- 3 Specimen of the same disease as No. 1 and 2. The new membrane is here very thick, but not of such considerable extent as in the preceding instances; it has been partially separated from the dura mater, to which it was firmly adherent.
- 4 Portions of Dura Mater and Pia Mater. The dura mater exhibits the effusion of blood and lymph upon its external surface. The pia mater is thickened both in that part which covers the exterior surface of the brain, and in that part which penetrates between the convolutions.

These changes were consequent on external injury.
- 5 Portion of Dura Mater very much thickened by the deposition of lymph upon its internal surface. The dura mater, with the adherent lymph, has been in part detached from the tunica arachnoidea.

- 6 Portion of Dura Mater exhibiting the growth of a Fungus from its external surface. The fungus has caused the absorption of the superincumbent bone, and has thus formed for itself the aperture through which it is protruded outwards. A part of the fungus is lodged between the skull and the dura mater, so as to form a tumor projecting inwards upon the brain.
- 7 Portion of Dura Mater thickened by a deposition of lymph, both upon its external and internal surfaces.
- 8 Portion of Dura Mater exhibiting the growth of small fleshy tumors both from its external and internal surfaces. Those arising from the external surface have caused the complete absorption of the bone in some situations, so that they appear on the outside of the skull.
- 9 Portion of Cerebrum, in the substance of which there is an Apoplectic Cell containing a dark red clot. There is also effusion of blood upon the surface of the brain, beneath the tunica arachnoidea. The blood within the brain appears to be loosely connected with the sides of the cavity containing it.
- 10 Portion of Cerebrum, in the substance of which there is an Apoplectic Cell containing a clot of a much lighter colour than in the preceding specimen. The blood appears to be closely united to the substance of the brain.

The two preceding specimens were taken from the same individual.
- 11 Portion of Cerebrum, in the substance of which there is an Apoplectic Cell containing a clot from which the red particles have entirely disappeared. The remaining part of the clot is closely united to the substance of the brain.
- 12 Portion of Cerebrum, in the substance of which there is an Apoplectic Cell, which contained a serous fluid. The two separate portions of brain, when put together, form the complete cell. The surface of the cell is irregular and broken.
- 13 Portion of Cerebrum, in the substance of which there is an Apoplectic Cell, which contained a serous fluid.
- 14 Portion of Cerebrum, in the substance of which there is an Apoplectic Cell of recent occurrence. The blood has been completely removed to shew the surface of the cell, which is broken and irregular.
- 15 Portion of Cerebrum exhibiting the effusion of blood upon its surface, beneath the tunica arachnoidea.
- 16 Portion of Dura Mater exhibiting the growth of a firm fleshy tumor from its internal surface.

- 17 Portion of Cerebrum, in the substance of which there was a large Tubercle. The tubercle has been detached from the cavity in which it was imbedded.
- 18 Sections of the Cerebrum displaying a peculiar change of structure in several situations. In some parts, the natural and diseased organization are blended together, while in others, the distinction between them is well marked.
- 19 Portions of Cerebrum, in the substance of which there are tumors of different sizes. Sections have been made of some of these tumors. They are of a firm consistence. In some of them, blood forms a part of the internal structure, in others, blood is deposited upon the surface.
Case described by Mr. Earle. *Medico-Chirurgical Transactions*, vol. iii. p. 59.
- 20 Cerebellum from a young subject. Its natural structure is almost entirely removed, and in its place there is a firm whitish substance, with specks of bone dispersed through it.
- 21 Portion of Cerebrum exhibiting an abscess in its substance.
- 22 Portion of Cerebrum exhibiting an abscess in its anterior lobe, which communicated with the lateral ventricle of the same side.
Case described by Mr. Earle. *Medical and Physical Journal*, vol. xxiii. p. 89.
- 23 Portions of Cerebrum which protruded in a case of Hernia Cerebri, and were removed during life.
Case described by Mr. Stanley. *Medico-Chirurgical Transactions*, vol. viii. p. 14.
- 24 Portion of Cerebrum exhibiting ulceration extending from the surface deeply into its substance.
The consequence of external injury.
- 25 Portions of Brain exhibiting lacerations of its substance with effusions of blood, in the two anterior, and in one of the middle lobes of the cerebrum, and in both hemispheres of the cerebellum.
- 26 Choroid Plexuses in which there are small tumors, consisting of a soft substance.
- 27 Choroid Plexuses in which there are small tumors, containing a soft caseous matter.
- 28 Ossified Arteries, which have been removed from the brain.
- 29 Portion of Cerebrum, in the substance of which there is a cyst which contained pus. The sides of the cyst are distinct, and easily separable from the surrounding substance of the brain.
- 30 Pituitary Gland considerably enlarged and softer than natural.

- 31 Portion of Cerebrum through which a bullet has passed. A quill is introduced into the tract of the bullet. At one extremity, this tract terminates in a rounded cavity, wherein the bullet was lodged.
- 32 Specimen of Hernia Cerebri, consisting of the protrusion of the substance of the brain through an aperture in the skull. It exhibits a vertical section of the protrusion and of that part of the brain from which it has arisen. In the centre of the protrusion, the vessels have given way, and particles of blood are here consequently intermixed with the cerebral substance. The portion of the skull surrounding the base of the tumor, and the membranes of the brain, were included in the section, for the purpose of shewing how the protrusion has taken place through the openings formed by ulceration, in the dura and pia mater, and through the aperture in the bone.
Case described by Mr. Stanley. *Medico-Chirurgical Transactions*, vol. viii. p. 22.
- 33 Section of the Hernia Cerebri taken from the preceding specimen. The deep groove which intervenes between the protruded mass and the portion of brain from which it has arisen, was occupied by the bone and by the membranes of the brain which have been completely removed.
- 34 Portions of Cerebrum which protruded in a case of Hernia Cerebri, and were removed during life.
Case described by Mr. Stanley. *Medico-Chirurgical Transactions*, vol. viii. p. 18.
- 35 Portion of Dura Mater which is converted into bone to a considerable extent, on each side of the falx cerebri.
- 36 Portion of Cerebrum exhibiting ulceration, which, commencing in the membranes, has extended into its substance.
The consequence of external injury.
- 37 Portion of Cerebrum exhibiting a bony tumor, which, originating in the pia mater, has penetrated between the convolutions into the substance of the brain.
- 38 A large Clot of Blood adhering to the internal surface of the Dura Mater which covered the upper part of one of the hemispheres of the Cerebrum.
The consequence of external injury.
- 39 A large Clot of Blood effused between the Dura Mater and the lateral part of the Skull.
It was ascertained that the Arteria Meningea Media had been ruptured by external violence.
- 40 Portions of Brain in the substance of which there are several Tumors of a scrofulous nature. One of these tumors occupies the whole internal part of the tuber annulare.
From a young subject.

- 41 Portion of Cerebrum exhibiting changes in the septum lucidum consequent on the distention of the lateral ventricles with fluid. A large portion of the septum has disappeared, and in its place there is an irregular opening. The portion of the septum which remains is considerably extended and so thin as to be transparent.
- 42 Portion of Cerebrum exhibiting changes in the septum lucidum, similar to those in the preceding specimen.
- 43 Portion of Cerebrum exhibiting a small tumor which was imbedded between its convolutions. The tumor is lobulated, and composed of a firm fleshy substance; and it was connected with the brain only by the pia mater and tunica arachnoidea.
- 44 Portion of Cerebrum exhibiting a small aneurism in the branch of the internal carotid artery which is lodged in the fissura Sylvii. The sac of the aneurism is filled by a firm coagulum. The sides of the sac consist apparently, in the greater part of their extent, of the dilated coats of the artery. The arteries with which the aneurism is connected are thicker than natural.
- 45 Portion of Dura Mater exhibiting a newly formed membrane closely adherent to its internal surface, and consisting of two layers, between which there was coagulated blood.
- The individual from whom this specimen was taken, suffered an attack of apoplexy a short time before death.
- 46 Portion of Dura Mater exhibiting an osseous tumor growing from the falx cerebri.
- 47 Portion of Cerebrum exhibiting an abscess in the upper part of one of its hemispheres, with the dura mater which covered it. The abscess communicates with the lateral ventricle by the aperture, through which a bristle is passed. The internal surface of the abscess is rough and granulated. Lymph is deposited upon the dura mater, and there is an ulcerated aperture in it, through which a bristle is passed.

From a young subject. The consequence of external injury.

FIFTH SERIES.

DISEASES AND INJURIES OF NERVE.

- 1 POPLITEAL NERVE, exhibiting the deposition of a soft caseous substance between its filaments.
- 2 Anterior Crural Nerve from a Stump. The extremity of the nerve forms a hard bulbous tumor. A division of the nerve is made, to shew that its filaments are continued into the tumor.
- 3 Portion of Brain, with the Optic Nerves, and some remains of the left eye. The eye is contracted in consequence of the escape of its humors, and the optic nerve is much diminished as far as its junction with the other nerve. Between the junction and the thalamus, the nerve of the opposite side is slightly diminished, and the thalamus on this side is smaller than on the other.
- 4 Portion of the Scapula, with the Axillary Nerves and Artery, from an individual in whom amputation of the arm at the shoulder-joint had been performed a considerable time before death. The several nerves are firmly united together, and their extremities form hard bulbous tumors, which are adherent to the cicatrix in the skin.
- 5 Portion of Brain, with the Optic Nerves, and remains of one of the eyes. The cornea is opaque, and the coats of the eye are collapsed. The optic nerve is considerably diminished between the diseased eye and its junction with the opposite nerve. From the junction, the diminution of the opposite nerve is continued to the thalamus.

SIXTH SERIES.

DISEASES AND INJURIES OF THE MEDULLA SPINALIS, AND ITS MEMBRANES.

- 1 | PORTION of the Medulla Spinalis exhibiting in two situations, thin plates of white cartilaginous substance, connected with the tunica arachnoidea.
- 2 | Portion of the Medulla Spinalis exhibiting numerous small portions of white cartilaginous substance connected with the tunica arachnoidea.
- 3 | Portion of the Medulla Spinalis, from a case of dislocation and fracture of the spine. The medullary substance, to the extent of two inches, and in the whole thickness of the cord, is softened and mixed with blood, which had been effused from its torn vessels. The altered portion of the medulla was situated opposite to the injured vertebræ.
- 4 | Portion of the Theca Vertebralis enveloping the bundle of nerves constituting the cauda equina. A tumor, of a firm fibrous texture, is connected with the external surface of the theca. This tumor, being contained wholly within the spinal canal, made considerable pressure upon the nerves.

SEVENTH SERIES.

DISEASES OF THE EYE, AND ITS APPENDAGES.

- 1 EYE, in which there is an adhesion of the cornea to the pupillary margin of the iris.
- 2 Eye, in which the cornea is obliterated, and the humors have entirely disappeared. Of the internal membranes, portions of the choroid and retina are alone distinguishable.
- 3 Eye, in which the iris is thickened and opaque.
- 4 Section of a Tumor which filled the cavity of the orbit. The tumor consists throughout of a soft whitish medullary matter, in the centre of which the eye is imbedded. The only part of the natural structure of the eye which remains is the sclerotica, within which, medullary matter is deposited, similar to that which forms the tumor around the eye. Some remains of the optic nerve may be traced from the sclerotica through the upper part of the tumor.
From a young subject.
- 5 Eye, from a young subject. No part of the natural structure of the organ remains; it is changed throughout into a mass of whitish medullary matter. With the upper part of this mass, the recti muscles are connected.
From the same subject as No. 1, in the Tumors.
- 6 Section of a Tumor which was removed from the cavity of the orbit in an adult. The tumor consists of some remains of the natural structure of the eye, and of a mass of soft grey matter, some of which is within the globe, and the remainder has apparently protruded through the sclerotica. Portions of the choroid membrane and retina may be discovered, apparently unchanged.

Presented by James Gillman, esq.

- 7 Sections of a Tumor which was removed from the cavity of the orbit in an adult, with a portion of Brain, from the same individual. The tumor consists of the remains of the eye, and of a mass of soft substance, which, in some situations, is white and medullary, and in others, of a perfectly black colour. The only parts of the natural structure of the eye which can be distinguished, are the optic nerve and the sclerotica. In the lower part of the bottle is a portion of the tumor which was extracted from the back part of the orbit. With the portion of brain the optic nerves are connected. One of the nerves has some of the medullary and black substance attached to it. This nerve is reduced in size as far as the junction, but beyond this, no change in it is visible.

From the same individual as No. 23, in Diseases of the Liver.

- 8 Eye, from an adult. The only parts of the natural structure of the organ which remain, are the sclerotica and cornea, the optic nerve, the iris, the choroid membrane, and the crystalline humor. The rest of the globe is filled by a soft and black substance, which has also protruded through the back part of the sclerotica. The optic nerve is reduced in size, but is otherwise sound.
- 9 Eye, from an adult. The large aperture in the cornea is the result of ulceration. The margin of this aperture was adherent to the iris, from which it has been separated. The iris, immediately around its pupillary margin, which was adherent to the cornea, is thickened, and lymph is deposited upon it, giving it a ragged appearance.

From an individual in whom there was Disease of the Brain, in the Tuber Annulare, which implicated the origins of the fifth and seventh Nerves. Case described by Mr. Stanley. *London Medical Gazette*, vol. i., No. 18.

- 10 Eye, from an adult. The retina has completely disappeared, and its place is occupied by a thick layer of dense osseous substance.
- 11 Lachrymal Gland of its natural size and structure, which, protruding from the orbit, was felt externally through the integument of the eyelid, and was removed by operation.
- 12 Section of a Tumor which was removed from the cavity of the orbit, with the eye and the optic nerve. The tumor adheres to the back part and sides of the sclerotica, and the optic nerve, elongated, passes through its centre. The texture of the tumor is firm and compact, and it was of a light yellow colour. The recti muscles, unaltered, adhere to it externally. The eye was protruded from the orbit. The humors have escaped through an ulcerated aperture in the cornea. The sclerotica is natural. The retina and the choroid membrane are collapsed, and occupy the centre of the eye between the entrance of the optic nerve and the iris. The space between the choroid membrane and the sclerotica is occupied by a clot of blood.
- 13 A Tumor, which was removed from the orbit, apparently consisting of the lachrymal gland enlarged and changed in structure. The texture of the tumor is very firm. Its divided surface is granulated, and there are white lines dispersed through it.

EIGHTH SERIES.

DISEASES OF THE SKIN.

- 1 PORTION of Skin which was removed from the forearm. A brown and soft fungous excrescence is attached to the skin, and in the cellular tissue beneath the skin there is a tumor about the size of a pea, soft and of a black colour. It appeared, that the fungus, originating from this tumor, had thence extended through an ulcerated opening in the skin.
- 2 Verrucæ, removed from the anus.
- 3 Verrucæ. The cuticle is in part separated and turned downwards, in order to shew that the diseased growth is entirely connected with it.
- 4 Section of a Foot upon which there is a Corn. The cuticle is removed to shew that the disease is confined to a thickening of that part. The cutis beneath the seat of the corn is natural, except that its vascularity is a little increased.
- 5 A large portion of Skin, removed from the back, from which a fungous excrescence of considerable extent has arisen.
- 6 Hand and part of the Forearm, which were removed on account of a fungous growth of considerable extent from the skin.

Case in Mr. Pott's Works, by Sir James Earle, vol. iii., p. 182.
- 7 Hand and part of the Forearm, which were removed on account of extensive ulceration of a peculiar character, which appears to have commenced in the skin.
- 8 Portion of Skin, with which an extensive dark-coloured fungus is connected, and which grew from the interior of an encysted tumor.

- 9 Verrucæ, removed from the anus. In the centre of the mass is the orifice leading to the anus, which was completely surrounded by the diseased growth.
- 10 Portion of the Scalp, in the substance of which there are small depositions of soft medullary matter.
From the same individual as No. 6, in the Tumors.
- 11 Hand, in which a part of the Thumb is lost, with contractions of the fingers and integuments of the palm.
The consequence of injury.
- 12 A Tumor, apparently consisting of altered skin, which was removed from the clitoris.
Presented by Dr. Conquest.
- 13 Portion of Skin exhibiting its greater degree of vascularity in the situation of a cicatrix.
- 14 Portion of Skin exhibiting the same fact as No. 13.
- 15 Portion of Skin exhibiting the same fact as No. 13.
- 16 A Curved Horny Excrescence, with the portion of Scalp from which it has arisen. A section of the excrescence at its base shews that it here consists of a soft white matter, which, in the recent state, resembled the contents of an encysted tumor.
- 17 Portions of the Horny Excrescence described in No. 16, which had been removed at different times.
- 18 A Soft Fleshy Excrescence, which was removed from the end of the nose. A section of the excrescence is made through its centre, to shew its internal texture, which is soft and pulpy. On the opposite side of the excrescence to that in which the section is made, a small cavity is seen, in which the end of the nose was imbedded.

NINTH SERIES.

DISEASES OF THE HEART AND PERICARDIUM.

- 1 ABUNDANT deposition of Lymph universally upon the pericardium.
From a child.
- 2 Thickening of the Pericardium, and abundant deposition of Lymph universally upon it, with enlargement of the Heart.
- 3 Deposition of Lymph universally upon the Pericardium, with complete adhesion of it to the Heart. A part of the membrane has been reflected to shew the lymph beneath it.
- 4 Deposition of Lymph universally upon the Pericardium. The appearance of the lymph in this instance differs from that in the preceding specimens. The heart is injected, but it is doubtful whether any of the injection has penetrated the lymph.
- 5 Deposition of Lymph universally upon the Pericardium, with the formation of a thin and transparent Membrane upon that part of the Pericardium which is reflected over the Heart.
- 6 General adhesion of the Pericardium to the Heart. Thickening and shortening of the aortic valves, with the growth of an excrescence from one of them. Irregular thickening of the lining of the aorta.
- 7 Very abundant deposition of Lymph upon the whole internal surface of the Pericardium. The lymph consists of fine processes of considerable length hanging loosely within the bag of the pericardium.
- 8 Deposition of Lymph and Blood upon the whole internal surface of the Pericardium, with enlargement of the Heart.

- 9 Enlargement of the left Ventricle, with thickening of its walls. Thickening of the aortic valves and of the lining of the aorta.
- 10 Enlargement of both Ventricles, with attenuation of their walls. The walls of the right ventricle are especially diminished in thickness.
- 11 Aortic Valves Ossified, and raised so as almost to close the communication between the ventricle and the aorta. A mere fissure is left between the valves. The ventricle is enlarged.
- 12 Enlargement of the left Ventricle, with thickening of its walls. Very thick deposition of fat upon the right ventricle. Ossification of the coronary arteries.
- 13 Left Ventricle, in which there are two portions of Lymph firmly adhering to its internal surface, near the apex. Within each portion of lymph there is a cavity which contained pus.
- 14 Section of the left Ventricle. Its membranous lining is partly ulcerated, and partly thickened by osseous deposition; its muscular structure, towards the apex, has undergone extensive suppuration.
- 15 Ossification of the Aortic Valves. The valves are raised, and two of them are united, so that the aorta communicated with the ventricle by a mere fissure.
- 16 Ossification of the Mitral Valve and of the Aorta.
- 17 Heart, exhibiting fungous growth from the aortic valves, with ulceration of them. Portions of the valves, with the septum between two of them, are destroyed. Behind one of the valves, the aorta is dilated into a pouch, and its inner membrane is here ulcerated.
- 18 Rupture of the left Ventricle at its apex; a piece of quill is introduced into the aperture. Around the aperture, the walls of the ventricle are very thin; and in this situation, there is a clot of blood in the cavity of the ventricle.
- 19 Contraction of the left Auriculo-Ventricular opening. The left auricle is enlarged, and a coagulum is firmly attached to its sides.
- 20 Aortic Valves, exhibiting a growth of Fungus from their loose borders.
- 21 Aortic Valves exhibiting a growth of Fungus from their surfaces, with ulceration of one of them.
- 22 Rupture of the left Ventricle. The opening is a mere fissure in the muscular substance. The walls of the ventricle around the opening are not thinner than in other situations. The muscular substance is softer than natural, and of a brown colour.

- 23 Section of the left Ventricle shewing several small depositions of soft medullary matter between its fibres.
From the same individual as Nos. 5 and 6 in the Tumors, and No. 10 in Diseases of the Skin.
- 24 Contraction of the left Auriculo-Ventricular opening, with enlargement of the cavity, and thickening of the parietes of the left auricle.
- 25 A small portion of Lymph attached to the inside of the right auricle. A section has been made of the lymph to shew that it is closely united to the membrane lining the auricle.
- 26 Contraction of the left auriculo-ventricular opening, with thickening and shortening of the cordæ tendineæ.
- 27 Rupture of the left Ventricle at about mid-distance between its basis and apex. The aperture is of considerable extent; and around it, the walls of the ventricle are of their natural thickness. The muscular substance is unchanged. Bony matter is deposited between the coats of the aorta.
- 28 Partial adhesions of the Pericardium to the Heart. Enlargement of the left ventricle with thickening of the membrane lining its cavity. Thickening and shortening of the aortic valves.
- 29 Small Tubercles formed beneath the layer of the Pericardium covering the Heart, and beneath the membrane lining its cavities.
Case of Tuberculated Sarcoma, described by Mr. Abernethy. *Surgical Observations on Tumors.*
- 30 Section of the left Ventricle exhibiting the formation of a pouch in its side. The inner surface of the pouch is smooth and apparently formed by the lining of the ventricle. The pericardium is adherent to the heart in the situation of the pouch.
- 31 Section of the left Ventricle exhibiting a large mass of bony matter deposited in the muscular substance at its basis.
- 32 Heart encircled at its base by a broad irregular plate of bone which occupied the place of the external portion of the pericardium. The pericardium in the rest of its extent was firmly adherent to the heart. The internal parts of the heart are sound.

- 33 Heart exhibiting changes of structure in several of its internal parts. The lining membrane of the right auricle is thickened and opaque. In the left auricle, it has undergone the same changes, but in a much greater degree. The tricuspid valve is thickened. The mitral valve is greatly thickened, and osseous matter is deposited along its loose margin. The cavity of the left auricle is enlarged. Upon the internal surface of this auricle and near the appendix, was a mass of lymph, on the removal of which the membrane beneath was discovered to be rough and otherwise changed. The aortic valves are thickened.
- 34 Heart of a child, exhibiting an abundant deposition of lymph universally upon the pericardium. That portion of the pericardium which forms the bag around the heart is thickened.
- 35 Section of a Tumor growing from the inside of the left auricle. When recent, it was of a yellowish colour, semitransparent and smooth. On detaching the tumor from the lining of the auricle, this was left rough and otherwise altered in its texture.
- 36 Heart of an adult, in which there is a large oval opening in the septum between the auricles.
- 37 Heart of an adult. The cavity of the right auricle is larger than natural, and its membranous lining is thick and opaque. The tricuspid valve is thickened. The cavity of the left ventricle is larger than natural. Its muscular substance is considerably thickened and its lining is opaque. The aortic valves are a little thickened, and there is soft matter deposited beneath the lining of the aorta just above the valves. The coronary arteries are thickened, and there is bony matter deposited between their coats. A rupture of the septum dividing the ventricles has taken place near its union with the posterior wall of the heart, by which a free communication is formed between the two ventricles. On the side of the left ventricle, the opening is about two inches in length and of a semilunar form. On the side of the right ventricle, the opening is much smaller and rounded.
- 38 Semilunar valves of the aorta, upon the surface of which there is a considerable deposition of bone.

TENTH SERIES.

DISEASES AND INJURIES OF ARTERIES AND VEINS.

- 1 Thoracic Aorta, exhibiting the deposition of bony matter between its coats, with ulceration of the internal membrane.
- 2 Aneurism of the Aorta at its origin, which has burst within the pericardium. The sac, which is small, has extended itself between the aorta and pulmonary artery, and has compressed the latter. A quill is introduced from the sac through the ruptured aperture, above which, a portion of the pericardium has been left in order to shew that the aneurism burst within the bag. The internal coat of the aorta is thickened and tuberculated. The internal coat of the pulmonary artery, where it is pressed upon by the sac, exhibits a deposition of lymph upon its surface.
- 3 Deficiency of a portion of the internal coat of the Aorta at its commencement, with dilatation of the external coats to a corresponding extent.
- 4 Popliteal Artery ossified, and a part of its cavity obliterated.
- 5 Right Renal Artery ossified, and the whole of its cavity obliterated.
- 6 Aorta of a Dog exhibiting the effects of a ligature. The inner coats of the artery are partially divided, and above the seat of the ligature is a conical coagulum.
This preparation was obtained by killing the dog twenty-four hours after a ligature had been placed on the aorta.
- 7 Sections of an Aneurismal Sac in the Abdominal Aorta, situated immediately below the superior mesenteric artery. The cœliac and superior mesenteric arteries are obliterated at their origins. The sac is completely filled by laminated coagulum. The coats of the aorta are thick and opaque.

- 8 Arch and Straight Portion of the Thoracic Aorta greatly dilated. The coats of the artery are generally thickened. Bony matter is deposited between them, and the inner surface of the artery is ulcerated at many points.
- 9 Aneurism extending from the left ventricle to the termination of the arch of the aorta. The sac is of immense size; the whole of its lower part is formed by the dilated aorta, while at its upper part, the sides are apparently formed by condensed cellular tissue. On the internal surface of this latter part of the sac there are small depositions of lymph. With the upper part of the sac, three ribs belonging to the right side of the chest, and a part of the sternum, are connected. A small fissure may be discovered in the side of the sac towards its upper part. In this situation the rupture of the sac took place. The heart is healthy, except that the pericardium is generally adherent to it.
- 10 Aneurism arising from the Arch of the Aorta, and thence extending forwards through the sternum and cartilages of the ribs to the front of the chest, where it forms a considerably projecting tumor.
- 11 Section of an Aneurismal Sac arising from the Arch of the Aorta. The cavity of the sac is almost filled by laminated coagulum. The internal membrane of the artery is thickened. The trachea is attached to the sac, and its internal membrane is elevated at several points in consequence of the pressure of the sac against it. The sac is closely adherent to the arteria innominata, right carotid and subclavian arteries.
- 12 Portion of the preceding Aneurismal Sac which has been removed to shew the laminated appearance of the coagulum contained in it.
- 13 Portions of the Femoral, Popliteal, and Tibial Arteries, the coats of which are almost completely converted into bone.
- 14 Aneurism arising from the Arch of the Aorta which has burst into the pulmonary artery. The internal coat of the aorta is irregularly thickened.

Case described by Dr. Wells. *Transactions of a Society for the Improvement of Medical and Chirurgical Knowledge*, vol. iii. p. 85.
- 15 Aneurism arising from the Arch of the Aorta which has burst into the pulmonary artery. The aneurismal sac appears to be formed entirely by the dilated aorta.
- 16 Section of an Aneurismal Sac arising from the Abdominal Aorta. A piece of bougie is introduced into the aperture by which the sac has burst.

17 Contraction of the Aorta and obliteration of the Vena Cava Inferior. Both vessels are imbedded in a mass of enlarged absorbed glands. The aorta is thickened, and its cavity is contracted just above its division into the iliac arteries. The vena cava, to the extent of three inches above the iliac veins, is completely filled by lymph, which is adherent to its inner membrane.

18 Aneurism of the Arteria Innominata pressing upon the trachea. The sac contains laminated coagulum, the deposition of which has extended into the origin of the right carotid artery, so as completely to close it.

Case described by Mr. Lawrence. *Medico-Chirurgical Transactions*, vol. vi. 227.

19 Femoral Artery and Vein, from a Stump. The coats of the vein are generally thickened, and in one situation are ulcerated. Lymph is deposited upon the inner membrane of the vein, and completely fills its cavity to some distance above the amputated extremity. A conical clot fills the cavity of the artery at its amputated extremity, and to some distance above it.

20 Arch of the Aorta, from which two Aneurisms have arisen. The sacs are separated by a portion of the artery about half an inch in extent, above which, they communicate by an aperture into which a quill is passed. Laminated coagulum lines both sacs. The internal surface of the aorta exhibits a tuberculated appearance from deposition between its coats.

Presented by James Gillman, Esq.

21 Aneurism of the left Axillary Artery, for the cure of which the subclavian artery has been tied. The upper part of the preparation consists of the left subclavian artery and the arch of the aorta. By tracing the subclavian artery downwards, the situation where it has been tied will be recognised. On the side of the ligature towards the heart, the artery is pervious to its extremity, which was closed only by a small coagulum. Between this coagulum and the sides of the vessel is an aperture into which a bristle is passed. Through this aperture, blood had passed from the artery to the outward wound. At a short distance above the situation of the ligature, several large branches arise. The portion of artery between the situation of the ligature and the aneurismal sac is completely closed by coagulum. The aneurismal sac is in part filled by laminated coagulum. Below the sac, is the remaining part of the axillary, with the commencement of the brachial artery. The axillary artery is here quite pervious to its connexion with the sac, and a large branch arises from it which divides into the infra-scapular and circumflex arteries. The axillary vein is connected with the sac, and is pervious. The coats of the subclavian artery above the situation of the ligature were so brittle that they yielded to the slightest force.

Case described by Mr. Charles Mayo. *Medico-Chirurgical Transactions*, vol. xii. p. 12.

22 Deposition of Lymph producing the obliteration of the trunk of the Femoral Artery and of the commencement of the Profunda.

- 23 Femoral Artery upon which a ligature was placed a considerable time before death. The extremities of the artery above and below the obliterated part are formed into conical sacs. The upper and lower portions of the vessel are connected by condensed cellular tissue. For some way above and below the obliterated part, the coats of the artery are thickened by the deposition of lymph between them.
- 24 Aneurism of the Popliteal Artery. There appears to have been a complete rupture of the artery in its whole circumference, so that the sac is formed entirely by the surrounding cellular tissue. Above and below the aneurism, the artery appears to be healthy. The sac is almost filled by laminated coagulum. The popliteal vein is pervious, but flattened by the pressure of the sac.
- 25 Aneurism arising from the termination of the Arch of the Aorta, which has burst into the left bronchus. The aorta is generally thickened and dilated. There is, besides, a small pouch continued from the artery to the bronchus, into which it has burst.
- 26 Aneurism arising from the Femoral Artery at its commencement, for the cure of which the external Iliac has been tied. The sac is in great part filled by laminated coagulum. Upon its lower part a portion of skin is left, with the aperture through which the aneurism burst externally. The ligature was applied about an inch and a quarter above the sac, and it has completely divided the internal coats of the artery. Between the situation of the ligature and the sac, there is a small deposition of lymph. Between the situation of the ligature, and the division of the common iliac, the artery is completely plugged with lymph. The coats of the artery are apparently healthy. The femoral artery, as it passes out of the lower part of the sac, is impervious. The profunda passes out of the middle of the sac, and is pervious. The femoral vein is open above and below the sac, and is obliterated by the pressure of the sac in the mid-space. The anterior crural nerve is connected with the sac, and is flattened by its pressure.
- 27 Aneurism of the Femoral Artery at its commencement, for the cure of which the external Iliac has been tied. The ligature was applied about half an inch below the origin of the internal iliac. The upper end of the artery is closed by a small portion of lymph; its lower end is closed by a clot which extends some way within the vessel. Between these clots, is a substance connecting the extremities of the artery, which appeared in the recent state to consist of the remains of the sheath of that part of the artery which had been encircled by the ligature. From the clot below the situation of the ligature, to within a short distance of the sac, the artery is pervious. From this pervious part of the artery, the epigastric and circumflex branches arise. Within the extremity of the artery which is connected with the sac, is a small conical clot completely filling the vessel. The coats of the artery appeared healthy throughout. The external iliac vein is pervious to within an inch of the sac, where it is obliterated.

- 28 Aneurism arising from the Carotid Artery about half an inch below its division, for the cure of which the operation has been performed. A section is made of the aneurismal sac shewing its cavity contracted and filled by layers of coagulum. A portion of straw is passed through the opening of communication between the sac and the artery. The situation where the artery has been tied is marked by a portion of straw which is introduced into the channel leading to the artery, from which the ligature has been withdrawn. Below the situation of the ligature, the artery is filled by a plug of lymph extending a considerable way down the vessel. Above the situation of the ligature, the coats of the artery are thickened, and lymph is deposited upon its internal surface; these appearances extend upwards to the division of the carotid into the external and internal branches, both of which are pervious. The coats of the aorta are thickened and tuberculated.

Case described by Mr. Vincent. *Medico-Chirurgical Transactions*, vol. x. p. 212.

- 29 Obliteration of the Vena Cava Inferior. The preparation consists of the remains of the vena cava, of the right kidney, and of a firm fleshy substance which has been formed between them. Great part of the kidney is absorbed. The vena cava is obliterated from its commencement below, almost to its termination in the auricle. The upper part of the vein is distended by fibrous matter, which appeared to have been separated from the blood. Below this fibrous matter, the vein could not be traced; it appeared to be completely lost in the diseased structure.
- 30 Portion of the Abdominal Aorta. Osseous matter is deposited between its coats to the extent that it forms a complete tube of bone.
- 31 Obliteration of the Vena Cava Inferior, and of the Common Iliac Veins, by a deposition of lymph into them. From the contracted state of the veins, it was inferred that they had been obliterated for a considerable time.
- 32 Portion of Artery exhibiting the division of the internal coats by three different kinds of ligature, viz. the large round, the small round, and the flat ligature. The small round ligature which is in the middle, appears to have made the most accurate division of the coats.
- It is necessary to state, that the experiment was made on a dead artery.
- 33 Sections of a small Aneurism arising from the Abdominal Aorta. The sac is situated between the coats of the artery. Its cavity is filled by laminated coagulum. Above and below the aneurism, bony matter is deposited between the coats of the artery, and its inner surface is ulcerated.
- 34 Abundant deposition of Lymph upon the inner membrane of the Femoral Vein. In some situations, the lymph is of considerable thickness. That part of the inner membrane of the

vein which is exposed, is of a dark colour, in consequence of its vessels being loaded with blood. The branches of the vein are plugged by firm coagula.

- 35 Femoral Artery and Vein, from a Stump. The extremity of the artery is firmly closed by a conical plug, which extends up the vessel to the origin of the first branch. The base of this plug is united to the lymph, which closes the extremity of the artery. The extremity of the vein is closed by lymph. The coats of the artery and vein are thickened, and closely united to the parts around.
- 36 Femoral Artery and Vein, from a Stump. The extremity of the artery is closed by the adhesion of its sides, but there is no coagulum within it. The extremity of the vein is open. Lymph is deposited upon the lining of the vein.
- 37 Femoral Artery and Vein, from a Stump. The extremity of the artery is open. Its cavity is filled to some distance by a coagulum, which adhered firmly to its coats. The extremity of the vein is closed, and there is a deposition of lymph upon its inner membrane.
- 38 Femoral Artery and Vein, from a Stump. The extremity of the artery is closed, and there is a coagulum within the vessel. The extremity of the vein is closed, and within its cavity is a conical coagulum.
- 39 Aneurism, arising from the Aorta at the commencement of the Arch. The sac has extended forwards through the sternum and ribs on each side, and elevating the pectoral muscles, has formed a large tumor upon the chest. A portion of skin attached to the front of the tumor, indicates, by its white appearance, that the process of sloughing had commenced in its centre. The sac in its progress towards the sternum, has extended itself on each side into the lung. A portion of the sac in the right lung is laid open, and is filled by laminated coagulum. On the left side, the ragged surfaces of the sac, and the shreds of coagulum protruding through it, mark the situation in which the aneurism burst into the chest.
- 40 Ossified Femoral Artery, from a Stump. In consequence of the occurrence of hæmorrhage, a second ligature was placed around the artery, about two inches above its amputated extremity. This ligature had separated before death. A portion of whalebone is passed into the aperture through which it was withdrawn. The cavity of the artery above and below the situation of this ligature, is filled by lymph, which is continued to a considerable distance up the vessel.
- 41 Aneurism of the Arch of the Aorta, with obliteration of the left Subclavian Artery at its origin. The walls of the sac appear to be formed entirely by the coats of the artery, which

are thickened. On one side of the preparation is the arteria innominata, with the left carotid artery; on the other side, is the left subclavian artery obliterated at its origin. An incision is made through the middle of the obliterated artery, to shew the lymph which fills it. At one extremity of the preparation, there is a wide irregular aperture in the sac, caused by its rupture.

- 42 Aneurism at the commencement of the Aorta. Two small pouches filled by lymph are seen behind two of the semilunar valves. The internal membrane of the artery is thickened.
- 43 Aneurism arising from the Carotid Artery at the point of its division. The sac is filled by layers of lymph loosely connected together. A portion of straw is passed through the opening of communication between the sac and the artery. Below the part where the coats of the artery have given way, its cavity is diminished by the pressure of the aneurism. The external and internal carotid arteries are pervious. The nervus vagus is exposed above and below the aneurism, and in the intermediate space, the nerve seems to be lost in the sac.
- 44 Portion of the Carotid Artery, with its division into the external and internal branches. Just above the division, the cavity of the internal carotid is slightly dilated, and its coats are thickened by the deposition of soft matter between them.
- 45 Portion of the Abdominal Aorta, in the coats of which there is a deposition of bony matter, with ulceration. In one situation, the ulceration has extended through the two inner coats of the artery to its outer cellular coat, which is dilated into a small pouch.
- 46 Aneurism arising from the Splenic Artery. Bony matter is deposited in the coats of the sac.
- 47 Dilatation of the Popliteal Artery, with thickening of its internal coat.
- 48 Aneurism of the Abdominal Aorta, which has extended backwards through the vertebræ and ribs, and forms a large sac exteriorly.
- 49 Anterior Tibial Artery, in which there is a small lacerated aperture completely penetrating its coats.
From a case of compound fracture.
- 50 Aneurism of the Renal Artery. Bony matter is deposited in the coats of the sac.
- 51 Aneurism arising from the Aorta immediately above one of the semilunar valves. The sac, which is about the size of a walnut, has extended between the pulmonary artery and the aorta. A portion of quill is introduced into the lacerated opening by which the sac burst into the pericardium.

- 52 Aneurism arising from the Arch of the Aorta, which has burst into the trachea. The sac is in great part filled by coagulum. The internal coat of the artery is thickened.
- 53 Aneurism of the Popliteal Artery. The preparation comprises the upper and lower portions of the popliteal vessels with a part of the aneurismal sac. The upper portion of the artery is pervious to its termination in the sac. The lower portion of the artery is pervious, and terminates in the sac by an opening of considerable length. The upper portion of the vein is obliterated. The lower portion is pervious.
- 54 Aneurism arising from the Arch of the Aorta, which has burst into the trachea and œsophagus. The sac is nearly filled by layers of coagulum. The blood has passed between the coagulum and the parietes of the sac in the direction marked by two pieces of whalebone, to the apertures by which the sac has burst.
- 55 Aneurism arising from the Arch of the Aorta, which has burst into the œsophagus. The internal coat of the artery is much thickened.
- 56 External Iliac Artery lacerated completely through its coats. The torn ends of the artery are connected together by a coagulum of blood. The coats of the artery are not obviously diseased.
- 57 Subclavian and Axillary Artery. The coats of the artery are thickened and its cavity is generally dilated.
- 58 Aneurism of the Straight Portion of the Thoracic Aorta. The sac has extended into the bodies of the vertebræ, and has burst into the œsophagus. The inner membrane of the artery has, throughout, a tuberculated appearance.
- 59 Femoral Artery and Vein, from a Stump. The coats of the artery are generally thickened. No adhesion of its sides has taken place at the amputated extremity. For some distance above this, the artery is filled by coagulum. The extremity of the vein is closed.
- 60 Aneurism of the Abdominal Portion of the Aorta extending into the bodies of the vertebræ. The sac appears to be formed by a general dilatation of the coats of the artery, which are thickened.
- 61 Femoral Artery and Vein, which were exposed and partly destroyed in the progress of a phagedenic sore. The coats of the artery to the extent of about an inch are completely disorganized. Two openings are visible in this portion of the vessel. Above the diseased part of the artery, a circular indentation in its walls may be perceived, which was occasioned by a ligature placed around it in consequence of hæmorrhage from the openings just mentioned. A portion of the vein is completely destroyed. A coagulum fills the cavity of the vein below the obliterated part.

- 62 Aneurism of the Carotid Artery. The aneurism includes a portion of the common carotid with the commencement of the external and internal carotid arteries. The sac is filled by a firm coagulum. About an inch below the sac, a ligature has been placed around the artery, which was not separated at the time of death. Between the ligature and the aneurism, the artery is filled by coagulum. Between the ligature and the origin of the subclavian artery, the carotid is filled by a coagulum which firmly adheres to its sides. The aorta presents a tuberculated appearance upon its internal surface from the deposition of soft matter between its coats. Portions of the nervus vagus and of the sympathetic nerve are firmly united to the aneurismal sac. The external and internal carotid arteries are closed at the point of their communication with the aneurism.
- 63 Aneurism of the Axillary and Subclavian Artery. The aneurism includes nearly three inches of the artery, a portion of which to this extent is wanting. The axillary plexus of nerves is connected with one side of the sac. Portions of the first and second ribs connected with the sac, form part of its boundaries. Only half an inch of the artery intervenes between the aneurism and the cluster of branches arising from the first portion of the subclavian. On each side of the aneurism, the coats of the artery are thickened by the deposition of soft matter between them.
- 64 Femoral Artery, exhibiting the laceration of its inner coats from external violence. The laceration is visible near the upper extremity of the artery, and at its lower extremity, the artery is closed by a ligature which was placed around it a short time before death.
- From a case of compound fracture, in which the limb was amputated.
- 65 Posterior Tibial Artery and Vein, which were wounded a few days before death. The wound is transverse, and it extends through one side only of each vessel. The large clot of blood seen in the preparation was found adhering to both vessels. The cavity in the clot was exactly over the division of their coats.
- 66 Ossified Femoral Artery, shewing the effects of a ligature which was placed around it a few days before death. The ligature was applied at a little distance from the extremity of the artery, and it has divided the two inner coats. Above the ligature, the artery, to the extent of two inches, is filled by coagulum.
- 67 Aneurism of the Subclavian and Axillary Artery. The aneurism occupies a part of the subclavian and the whole extent of the axillary artery to the commencement of the brachial. The sac was of large size. A small portion only of it is preserved connecting the two parts of the artery. Bristles are passed into the apertures of communication between the artery and the sac. The axillary nerves are connected with the sac. The artery is not obviously changed in structure on either side of the aneurism.

- 68 Aneurism of the Abdominal Portion of the Aorta. The aneurism extends from the superior mesenteric to the iliac arteries. A portion of the duodenum is connected with the aorta and communicates with it by an aperture through which the aneurism burst into the intestine. The superior and inferior mesenteric arteries are obliterated at their origins.

Presented by John Thorn, esq.

- 69 Aneurism of the Arch of the Aorta. The aneurism, situated in the upper part and right side of the arch, involves the arteria innominata. Very firm and thick laminated coagulum lines the sac. By this coagulum, the origin of the right subclavian artery is closed. A portion of the coagulum was found detached, and almost loose in the cavity of the aorta, as it now appears in the preparation.

- 70 Aneurism in the upper part of the Arch of the Aorta. Part of the sac is formed by the dilated artery, the coats of which terminate abruptly. The remaining part of the sac is formed by condensed cellular tissue, and by the sternum. The round holes produced by absorption, are visible upon the internal surface of the sternum. One of these penetrates the bone to its external surface, and there is an ulcerated aperture in the corresponding portion of the integuments.

- 71 Portion of the Vena Cava Inferior in which there is a lacerated aperture, about two inches above the iliac veins.

From the same individual as the lacerated bladder No. 21, and the lacerated intestine No. 51.

ELEVENTH SERIES.

DISEASES OF THE LUNG, PLEURA, AND BRONCHIAL GLANDS.

- 1 Portion of the Pleura Costalis converted into Cartilage.
- 2 Adventitious Membrane formed upon the Pleura Pulmonalis.
- 3 Portion of Lung with firm cartilaginous tumors growing in its substance.
- 4 Portion of the Pleura Pulmonalis, converted into Bone.
- 5 Portion of the Pleura Costalis, converted into Bone.
- 6 Small Tubercles formed in the substance of the lung.
- 7 Portion of Lung having small tubercles in its substance. The lung is minutely injected, but the injection does not seem to have penetrated the newly deposited matter.
- 8 Tubercles in the Lung.
- 9 Tubercles in the Lung.
- 10 Abscess in the Lung. The surrounding substance of the lung is sound.
- 11 Tubercles in the Lung with enlargement of the air-cells.
- 12 Tubercles in the Lung.
- 13 Depositions of Medullary Matter in the Lung.

- 14 Bronchial Glands converted into earthy matter.
- 15 Sections of Bronchial Glands converted throughout into a soft medullary substance, in which there are cells filled by blood.
- 16 Bronchial Glands enlarged and partly changed into a scrofulous matter.
- 17 Bronchial Glands enlarged and converted into a soft medullary matter.
From the same individual as No. 19 in Diseases of the Brain.
- 18 Abscess and Induration of the substance of the Lung with thickening of the Pleura Pulmonalis.
- 19 Tubercles in the Lung, consisting of a firm whitish substance.
- 20 Tubercles in the Lung.
- 21 Tubercles in the Lung, consisting of soft medullary matter.
From the same individual as No. 19 in Diseases of the Brain.
- 22 Tubercles in the Lung, of a firm fleshy structure.
- 23 Rupture of the Air-cells, which has caused the distention of the Pleura Pulmonalis into a sac.
- 24 Tubercles formed chiefly near the surface of the Lung. They consist of a brown soft matter. The intervening substance of the lung is sound.
- 25 Portion of Lung exhibiting sections of medullary tumors of different sizes. Some of them approach the surface, and elevate the pleura. The intervening substance of the lung is sound.
- 26 Portion of Lung in which there are soft medullary Tumors. The intervening substance of the lung is condensed.
- 27 Sections of a Lung exhibiting the effects of inflammation. By interstitial deposition, its substance is rendered solid throughout.
- 28 Portion of injected Lung with tubercles dispersed through it. None of the injection has penetrated the tubercles. The lung was injected from the pulmonary artery.

Presented by Richard Owen, esq.

TWELFTH SERIES.

DISEASES OF THE STOMACH.

- 1 **ULCERATION** extending completely through the coats of the Stomach. The edges of the ulcer are smooth, and the surrounding parts are unaltered.
- 2 General Thickening of the coats of the Stomach, with extensive ulceration, which has completely penetrated them in two situations.
- 3 A large circumscribed Tumor at the Pyloric end of the Stomach, with smaller tumors around it. The divided tumors, as well as the cut edges of the stomach itself, exhibit white bands intersecting a firm substance. In one situation there is an irregular and ragged ulceration of the mucous membrane.
- 4 Portion of the Stomach, exhibiting numerous small points of ulceration. Two or three small black sloughs are seen in different parts of the mucous membrane.

From an individual to whom small doses of arsenic had been for some time administered on account of a cutaneous affection.
- 5 General Thickening of the coats of the Stomach with ulcers in the mucous membrane. The divided coats exhibit the appearance of white bands intersecting a firm cartilaginous structure.

From the same individual as the diseased large intestine, No. 23.
- 6 Thickening, with ulceration of the coats of the Stomach. A large and deep ulcer has formed in the thickened coats close to the pylorus.
- 7 Thickening of the coats of the Stomach, with the formation of a cellular structure at the pylorus.

- 8 Digestion of the Stomach by its own secretion. There are four large, irregular apertures completely penetrating its coats.
- 9 Stomach of an individual who died in consequence of having taken Sulphuric Acid. The deep red colour extending throughout the interior of the stomach is occasioned by the blood effused from the eroded vessels. The mucous membrane, throughout the greater part of the organ, is destroyed. The surface exposed beneath it is rough and shaggy. In the œsophagus and towards the pyloric end of the stomach, some part of the mucous membrane remains, and it has a corrugated appearance.
- 10 Stomach of an individual who died in consequence of having taken Oxalic Acid. The mucous membrane is of a dark brown colour, and very much softened. In some situations it is so completely disorganized as to have spontaneously separated in loose shreds. Upon the œsophagus, the mucous membrane is corrugated.
- 11 Ulcer, with discolouration in a portion of the Stomach. There has been a thinning of the discoloured portion of the stomach, and in the centre of this attenuated part, is a large irregular aperture with ragged edges.
- 12 Stomach, exhibiting the growth of a large Tumor from its mucous membrane near the pylorus. The tumor consists of a firm substance intersected by white lines. The mucous membrane immediately around it is thickened and indurated.

Presented by William Radnor, esq.

THIRTEENTH SERIES.

DISEASES AND INJURIES OF THE INTESTINES, PERITONEUM, AND MESENTERIC GLANDS.

- 1 DEPOSITION of small Tubercles in the peritoneal coat of the Small Intestine, and in the Mesentery.
- 2 Tubercles of a larger size in the peritoneal coat of the Small Intestine.
- 3 Thickening of the peritoneal coat of the Small Intestine, and of the layers of the Mesentery. The layers of the mesentery have been separated to shew the lymph by which they are united.
- 4 Portion of thickened Peritoneum.
From the same individual as the preceding specimen.
- 5 A large mass of diseased structure which occupied the situation of the Mesenteric Glands. It consists of distinct tumors of a soft medullary texture and of a reddish brown colour.
From the same individual as No. 6 in Diseases of the Liver, and No. 43 in Diseases of the Testicle.
- 6 Clusters of small Tubercles in the peritoneal coat of the Small Intestine, with agglutination of the convolutions.
- 7 A portion of the Jejunum and two portions of the Ilium taken from the same individual. In each portion of intestine there is a circular contraction to the extent of almost completely obliterating its cavity. At the contracted part, the mucous membrane is ulcerated, and above it, the intestine is widely dilated, and its coats are generally thickened.

Presented by John Bury, esq.

- 8 Agglutination of the Small Intestines.
- 9 Agglutination of the Small Intestines.
- 10 Portion of the Transverse Arch of the Colon having a large Tumor attached to it. This tumor has taken the place of the natural structure of the omentum, and is made up of the agglutination of many small and round fleshy tumors.
- 11 Ulceration of the Mucous Membrane of the Ilium, widely diffused, with ragged edges.
- 12 Ulceration of the Mucous Membrane of the Jejunum, diffused, and penetrating at one point, through the coats of the intestine.
- 13 Ulcers in the Mucous Membrane of the Jejunum.
- 14 Ulceration of the Jejunum, which has extended completely through the coats of two contiguous and adherent portions of intestine.
- 15 Portion of Jejunum, in which there is general thickening of the valvulae conniventes, and ragged ulceration of the mucous membrane.
- 16 Enlargement of the Mucous Glands of the small intestine.
From the same individual as No. 5 in Diseases of the Arteries.
- 17 Portion of Small Intestine universally thickened, and having the mucous membrane thrown into irregular eminences, which exhibit a rough surface, and numerous minute points of ulceration.
- 18 Portion of Small Intestine universally thickened, with ulceration and sloughing of the mucous membrane.
- 19 Portion of Jejunum, exhibiting distinct depositions of soft medullary matter between its coats.
- 20 Portion of Colon, exhibiting enlargement of the mucous glands, with sloughing and ulceration of them.
- 21 Portion of Colon, exhibiting the mucous membrane extensively and raggedly ulcerated, and hanging in shreds within its cavity.
- 22 Portion of Colon exhibiting the ulcerated surface of the mucous glands after the detachment of sloughs which had formed upon them.

- 23 Portion of Colon, the mucous membrane of which is thrown into irregular massy folds.
From the same individual as No. 5 in Diseases of the Stomach.
- 24 Portion of Colon exhibiting a general thickening of the mucous membrane, with warty excrescences, and numerous small ulcers upon its internal surface.
From the same individual as the Portion of Jejunum, No. 15. Case of Fungus Hæmatodes, described by Mr. Langstaff. *Medico-Chirurgical Transactions*, vol. iii. p. 277.
- 25 Portion of Colon exhibiting a general thickening of the intestine, with fungous growths from the mucous membrane.
- 26 Enlargement of the Mucous Glands in the Cæcum, in the neighbourhood of the valve.
From the same individual as the portion of Small Intestine, No. 16.
- 27 Hæmorrhoids, which consist of folds of the mucous membrane of the rectum.
- 28 Fungus growing from the Mucous coat of the Cæcum, with ulceration extending from the Cæcum through the abdominal muscles, forming an artificial anus in the groin.
- 29 Portion of Colon generally thickened, with ulceration of its mucous membrane at many distinct points.
- 30 Appendix Cæci, in which a green-gage stone is lodged.
- 31 Portion of Rectum, the cavity of which, at its upper part, is contracted, without any visible change of structure.
- 32 Portion of Rectum, exhibiting a contraction of its cavity, with thickening of its coats to the extent of two inches from the anus. Above the contraction, the intestine is dilated, and below it, is a ragged ulceration of the mucous membrane, which completely penetrates the intestine at one point. The divided coats exhibit white bands intersecting a hard gristly substance.
- 33 Rectum, exhibiting a contraction of its cavity which, commencing two inches above the anus, is continued four or five inches up the gut. The coats of the intestine are generally thickened, and the divided edges exhibit white bands intersecting a gristly substance. The mucous membrane is universally thickened and tuberculated. Around the intestine, the cellular tissue has undergone the same change of structure, and has involved the uterus and vagina in its disease.

- 34 Rectum, exhibiting general thickening and ulceration of its coats. There are numerous ulcerated apertures in the gut just above the anus; one of these apertures extends completely through the intestine and through the coats of the bladder into its cavity. The integuments around the anus are much thickened and formed into irregular folds.
- 35 Fistula, extending from the anus upwards by the side of the rectum between the fibres of the levator ani muscle and the longitudinal muscular fibres of the intestine.
- 36 Portion of Rectum, from a young subject. A quill is passed through an aperture in the upper part of the intestine where it is covered by peritoneum; this aperture was made by the end of a metallic glyster-pipe.
- 37 Rectum, from a middle aged female, exhibiting a complete removal of its mucous membrane by ulceration, to the extent of several inches. Abscesses, which formed in the cellular tissue around the intestine, have burst into it by several openings.
- 38 Rectum, in which there are hæmorrhoidal tumors distended by coarse wax, which was injected into the inferior mesenteric vein.
- 39 Soft substances discharged per anum. Some of these resemble pieces of membrane, others have a tubular form, and there are some resembling pieces of fat.
- 40 Ulceration of the Ilium. A portion of omentum is firmly adherent to the intestine in the situation of the ulcer.
- 41 Mesenteric Glands enlarged and converted into a soft caseous matter.
- 42 Rectum, exhibiting the growth of soft medullary matter from its mucous membrane. The coats of the gut are generally thickened, and in various parts ulcerated.
- 43 Hæmorrhoids around the anus. They consist partly of the mucous membrane of the rectum, and partly of the external integuments, thickened and formed into irregular folds.
- 44 Soft substances diacharged per anum, possessing the same character as those which have been described, No. 39.
- 45 Duodenum, exhibiting the effects of Sulphuric Acid. The mucous membrane is in some situations corrugated, and in others it is completely destroyed.
- From the same individual as the Stomach, No. 9.
- 46 Fistula, with Ulcers in the Rectum. The fistulous passage extends some way upwards along the outside of the rectum. Other passages are continued from it around the intestine. In the mucous membrane are numerous minute points of ulceration. The fistulous passages are lined by a soft villous membrane.

- 47 Rectum, exhibiting a contraction of its cavity which, commencing an inch above the anus, is continued to the extent of five inches up the intestine. The coats of the intestine are generally thickened, and of a gristly texture; the mucous membrane in some situations is tuberculated, and in others ulcerated. The cellular tissue around the intestine is indurated. A portion of the coats of the bladder has undergone the same change of structure as the coats of the rectum.
- 48 Cæcum and portion of the Colon, exhibiting enlargement and sloughing of the mucous glands. Many of the glands are simply enlarged, others have sloughs formed on their surfaces, and in some situations, the sloughs are in progress of detachment.
- 49 Portions of Large and Small Intestine exhibiting the same condition of the mucous glands as the preceding specimen.
- 50 Fistula, extending some way upwards on the outside of the rectum, and then opening into its cavity.
- 51 Portion of Ilium exhibiting a complete rupture of its coats in the transverse direction.
 The result of external violence.
 From the same individual as No. 71 in Diseases of Arteries, and No. 21 in Diseases of the Bladder.
- 52 Rectum, exhibiting ulceration of the mucous membrane with alteration in the muscular fibres. A portion of the mucous membrane is separated from the muscular fibres to shew the change they have undergone. The fibres are thickened and converted into a firm brown substance intersected by white lines.

FOURTEENTH SERIES.

DISPLACEMENTS OF INTESTINE AND OMENTUM, (HERNIÆ,) INTUSSUSCEPTIONS.

- 1 Inguinal Hernia. The testicle in this instance has not passed through the abdominal ring, it was found just within the opening, and is seen to be connected with the upper part of the hernial sac. The body of the gland is smaller than natural; the epididymis is incomplete, it does not join the body of the testicle.
- 2 Inguinal Hernia. A portion of intestine was found just behind the abdominal ring, strangulated by a preternatural band of adhesion extending from the peritoneum near the ring, to the mesentery. The testicle is situated just within the upper opening of the inguinal canal. The gland is smaller than natural; the epididymis does not join the body of the testicle.
The two preceding specimens are described by Mr. Lawrence. *Treatise on Hernia*, page 243, edit. iv.
- 3 Inguinal Hernia, combined with Hydrocele of the tunica vaginalis testis, and a membranous Cyst in the spermatic cord, immediately above the testicle.
- 4 Inguinal Hernia which has just passed through the opening in the aponeurosis of the external oblique muscle. The several coverings of the sac are displayed. The sac itself is laid open, and a quill passed into it. A bristle is passed beneath the epigastric artery.
- 5 Inguinal Hernia. A portion of the aponeurosis of the external oblique and the lower border of the internal oblique and transversalis muscles are raised from their connexions to shew the passage of the hernial sac through the aperture in the fascia transversalis. A bristle is introduced beneath the margin of the fascia constituting one of the lateral boundaries of the aperture. The coverings of the sac are displayed. The sac itself is opened.

- 6 Inguinal Hernia. The sac is divided into two portions by a membranous partition, in which there are several small apertures.
- 7 Congenital Hernia.
- 8 Congenital Hernia.
- 9 Inguinal Hernia, exhibiting the obliteration of the mouth of the sac from the use of a truss. The peritoneum has a puckered appearance in the situation where the mouth of the sac formerly existed.
- 10 Inguinal Hernia, exhibiting the same circumstances as the preceding specimen.
- 11 Inguinal Hernia, strangulated. The intestine, not having passed through the opening in the aponeurosis of the external oblique muscle, is contained within the inguinal canal. The aponeurosis is divided and turned upwards. The sac is opened, shewing the strangulated gut of a deep red colour. The lower border of the internal oblique and transversalis muscles crosses over the neck of the sac. Two bristles are passed between the thickened margin of the peritoneum, constituting the stricture, and the strangulated intestine. A bristle is passed beneath the epigastric vessels.
- 12 Inguinal Hernia combined with Hydrocele of the tunica vaginalis testis. The Hernia is situated behind the enlarged tunica vaginalis, which is laid open anteriorly. The neck of the hernial sac is opened and a portion of quill introduced into it. The lower part of the sac is opened to shew its contents, which are cœcum and colon. The vessels of the spermatic cord are separated. The spermatic artery and the vas deferens pass together along one side of the sac, and the spermatic veins are at some distance from them.
- 13 Inguinal Hernia. A portion of intestine has become extensively and firmly united to the sac immediately below the opening in the aponeurosis of the external oblique muscle.
- 14 Inguinal Hernia, with displacement of the vessels of the Spermatic Cord. The spermatic artery and the vas deferens are situated close together; the spermatic veins are at some distance from them.
- 15 Inguinal Hernia combined with Hydrocele of the tunica vaginalis testis. The hernial sac extends downwards to the upper part of the tunica vaginalis.
- 16 Portion of Ilium which was strangulated in an umbilical hernia. In the situation of the stricture, the intestine is considerably contracted, and its coats are sphacelated in the greater part of its circumference. A piece of whalebone is passed through one of the sphacelated openings.

- 17 Portion of Jejunum which was strangulated in an umbilical hernia. In the situation of the stricture, the intestine is contracted, and immediately above it, is an ulcerated aperture into which a portion of straw is passed.
- 18 Portion of Small Intestine which was strangulated in a femoral hernia. Its coats are sphacelated in the line of the stricture, and nearly in the whole circumference of the intestine.
- 19 A considerable portion of the Small Intestines of a Child strangulated by a preternatural band, which is connected at both its extremities with the mesentery. Bristles are passed behind the band. The whole of the intestine below the bristles is strangulated and is of a deep red colour. The mesenteric glands are swollen.
- 20 Portion of Small Intestine exhibiting a contraction, which has been caused by one of the appendices epiploicæ, with a part of the omentum, having passed tightly around it.
- 21 Femoral Hernia, in the Male, strangulated. The contents of the sac are omentum and intestine. The sac is separated from the fascia propria. Gimbernat's ligament is closely applied to the inner side of the neck of the sac. The epigastric artery is situated immediately above, and to the outer side of the sac.
- 22 Femoral Hernia, of recent occurrence. On one side of the preparation, is the fascia propria just below the semilunar edge of the fascia lata. On the other side, is the peritoneal sac separated from the fascia propria, and withdrawn from beneath the crural arch.
- 23 Femoral Hernia, of recent occurrence, displaying the formation of the fascia propria. The peritoneum has been separated from the abdominal muscles. Cellular tissue protruded beneath the crural arch, forms a distinct pouch just below, and on the inner side of the semilunar edge of the fascia lata.
- 24 Inguinal Hernia, in the Female. The sac has enlarged within the inguinal canal, and has thence extended through the opening in the aponeurosis of the external oblique muscle, so that part of the sac is lodged within the inguinal canal, and part in the labium pudendi. The aponeurosis of the external oblique is reflected from the upper part of the sac, the neck of which is crossed by the internal oblique and transversalis muscles.

Cast from the subject of this Hernia, No. 4.
- 25 Femoral Hernia, in which the operation has been performed. The sac has sphacelated; the remains of it will be recognised by its black colour. The incision of the stricture has been continued from the anterior part of the sac directly upwards. The obturator artery arising by a common trunk with the epigastric, descends on the outer side of the mouth of the sac.
- 26 Femoral Hernia, in which the operation has been performed. The coverings of the sac are

displayed. The fascia superficialis is separated from the fascia propria. The fascia propria is also raised; it is thick and its internal surface is cellular. Within the fascia propria, the remains of the sac will be recognised. The incision of the stricture has been made through Gimbernat's ligament obliquely upwards and inwards.

- 27 Femoral Hernia, in which the operation has been performed. The incision of the stricture has been continued from the anterior part of the sac directly upwards. The epigastric vessels are situated about half an inch from the outer side of the mouth of the sac.
- 28 Femoral Hernia. The coverings of the sac are displayed. The fascia superficialis and fascia propria will be recognised, and within the latter, is the sac itself, into which a portion of quill is passed. The mouth of the sac will but just admit a full-sized urethra bougie. The epigastric vessels are situated about three quarters of an inch distant from the outer side of the mouth of the sac.
- 29 Two Inguinal Herniæ. On the right side, the hernia having passed from the abdomen through the fascia transversalis, has descended into the scrotum. The epigastric artery is close to the inner margin of the mouth of the sac, and the spermatic cord is behind the sac. On the left side, the hernia has passed from the abdomen directly through the aponeurosis of the external oblique muscle. The epigastric artery is near the outer margin of the mouth of the sac. The spermatic cord is between the sac and the outer column of the aponeurosis of the external oblique. The sac of this hernia is withdrawn from the covering of the fascia transversalis, which was protruded before it.
- 30 Inguinal Hernia, which passed from the abdomen directly through the opening in the aponeurosis of the external oblique muscle. The spermatic cord is on the outer side of the sac. The fascia transversalis is protruded before the sac. Immediately below the mouth of the sac, the peritoneum lining the abdominal muscles is dilated into a wide pouch.
- 31 Four Herniæ, an inguinal and a femoral on each side. The spermatic cord is situated on the outer side of each inguinal hernia. The fascia transversalis protruded before the right inguinal hernia is divided, and in part separated from the sac.
- 32 Inguinal Hernia. A portion of the sigmoid flexure of the colon, displaced from its natural situation, is closely connected by peritoneum with the mouth of the sac.
- 33 Umbilical Hernia, exhibiting an irregular absorption of its peritoneal sac, by which apertures of different sizes are formed in it.
- 34 Portion of the Abdominal Muscles, exhibiting a large circular opening in the linea alba, through which an umbilical hernia was protruded.

- 35 Inguinal Hernia. The coverings of the sac are thickened and consolidated by inflammation. The internal surface of the sac is rough in consequence of the deposition of lymph upon it.
- 36 Two Herniæ in the Linea Alba, above the umbilicus. The larger sac contains omentum. Below the smaller sac, is a hole in the linea alba, through which fat is protruded.
- 37 Congenital Hernia. Its sac is divided into two portions, which communicate by a large oval aperture.
- 38 Congenital Hernia from an adult, upon whom the operation had been performed. The testicle and the hernial sac not having passed through the opening in the aponeurosis of the external oblique muscle are situated within the inguinal canal. The upper border of the mouth of the sac was divided for the removal of stricture upon the intestine, which was protruded through it.
- 39 Inguinal Hernia, combined with Hydrocele. Several folds of intestine are firmly adherent to each other and to the hernial sac. The enlarged tunica vaginalis testis is situated in front of the hernia. Bristles are passed beneath the spermatic vessels, which have become placed at a little distance from each other.
- 40 Inguinal Hernia, upon which the operation has been performed. Between the peritoneum and the abdominal muscles, and immediately above the mouth of the sac, there is a cavity in which was found a portion of the intestine that had been strangulated. It appeared that this portion of intestine had been pushed from the hernial sac, into the cellular tissue between the transversalis muscle and the peritoneum.
- 41 Femoral Hernia. The contents of the sac are, omentum, with part of the sigmoid flexure of the colon and a portion of small intestine.
- 42 Portion of Small Intestine from an inguinal hernia, exhibiting the impression of the stricture upon its coats.
- 43 Portion of Small Intestine from a femoral hernia, exhibiting the effects of strangulation upon a part of its circumference. There are sphacelated openings in the portion of intestine, which was strangulated. Around these openings, the coats of the intestine are very soft and readily separable.
- 44 Portion of Small Intestine from a femoral hernia, exhibiting the effects of strangulation. In the upper part of the preparation, the impression of the stricture may be recognised by the thinning of the coats of the gut, and at one point, by the ulceration of them. The portion of intestine which was strangulated is distinguished by its dark colour and disorganized state.

- 45 Inguinal Hernia of the left side, shewing the relation of the epigastric artery to the mouth of the sac. The sac is laid open and separated from its immediate coverings.
- 46 Umbilical Hernia containing omentum. The omentum is firmly adherent to the sac, and in one situation, a part of the sac is absorbed so that the omentum is here in contact with the skin.
- 47 The Sac of an Inguinal Hernia. The peritoneum is slightly thickened throughout.
- 48 Femoral Hernia, in the male, which has been dissected with a view to display the peculiar form of the tumor.
- 49 Portion of Omentum, in which, by the adhesion of its contiguous surfaces, an aperture is formed through which a finger could be readily passed.
- 50 Inguinal Hernia combined with Hydrocele. The enlarged tunica vaginalis is situated in front of the hernia; it will be recognised by the projection of the testicle within its lower part. The hernial sac is large; it communicated with the abdomen by a wide orifice, and there is a portion of omentum adherent to it. Between the hernial sac and the enlarged tunica vaginalis, is a small and distinct sac, which had no communication with the abdomen.
- 51 Femoral Hernia, upon which the operation has been performed. A division of Gimbernat's ligament has been made horizontally inwards and close to the os pubis.
- 52 Femoral Hernia. A small peritoneal sac has been protruded between the fibres of Gimbernat's ligament. A bristle is passed beneath a band of Gimbernat's ligament, intervening between the peritoneal sac and the space through which the femoral hernia usually passes.
- 53 Portion of Small Intestine, from which a Diverticulum is continued. The diverticulum is adherent at its extremity, to the contiguous part of the mesentery. A circular orifice will be recognised between the diverticulum and the opposite surface of the mesentery. Within this orifice, a portion of intestine became strangulated.

Presented by E. P. Pridham, esq.
- 54 Congenital Hernia. The preparation consists of the testicles from an adult, in whom they had remained within the inguinal canal. Both the glands are considerably smaller than natural, and with one of them, a peritoneal sac is connected.
- 55 Two Femoral Herniæ, in the male, exhibiting different relations of the obturator artery to the mouth of the hernial sac. Both the obturator arteries arise by common trunks with the epigastric arteries. On one side, the obturator artery descends to the obturator foramen, close to the outer margin of the mouth of the sac. On the other side, the obturator artery, in its course to the obturator foramen, turns around the front and inner margin of the mouth of the sac.

- 56 Congenital Hernia, upon which the operation has been performed. On one side of the preparation is a portion of the hernial sac, which extended from the abdominal ring into the scrotum. On the other side, is another portion of the sac, which was within the cavity of the abdomen. Within this portion of the sac some small intestine and the testicle were contained. The intestine has been drawn on one side to permit the testicle being seen. It appeared that in the operation, the whole of the strangulated intestine had been pushed from the lower part of the hernial sac, into that part of it which was within the abdomen.
- 57 Inguinal Hernia. There are two distinct hernial sacs closely united. Each sac has its separate orifice of communication with the abdomen. The orifice of one sac is very small; it will be recognised by the portion of quill which is introduced into it. The spermatic cord is behind the hernial sacs.
- 58 Femoral Hernia, in the male. The hernial sac with its contents has sphacelated; its remains consist of a pulpy mass, in which no distinction of parts can be recognised. Three distinct portions of small intestine were protruded into the hernial sac. A portion of straw is passed into each orifice of the intestine.
- 59 A large portion of Omentum which was removed in the operation upon an inguinal hernia.
- 60 Intussusception in the small intestine of a child.
- 61 Intussusception of a large portion of the Ilium, with the Appendix Cæci, within the Cæcum and ascending Colon. In this instance, there is a diverticulum ili which has passed into the colon with the intussuscepted ilium, but has become everted, and has passed back again into the ilium; thus producing a double intussusception, of the ilium within the colon, and of the diverticulum within the ilium. At the upper part of the preparation is seen the cæcum with the commencement of the intussusception, and the retroverted diverticulum ili; at the lower part, is the whole of the intussuscepted ilium, which is of a dark brown colour in consequence of its vessels being distended with blood.
- 62 Intussusception of a considerable portion of the Ilium within the Colon.
- 63 Portion of Small Intestine, to the extent of nearly three feet, which was discharged in a gangrenous state, from the anus.
It is presumed that there had been an intussusception of this portion of intestine.
- 64 The Cæcum and a portion of the Ilium connected with it, from the same individual as the preceding specimen. The cæcum is opened to shew the condition of its mucous membrane, which is extensively ulcerated. Portions of it hang in shreds in the cavity of the intestine. A straw is passed from the cæcum into the valve of the ilium. The ilium is opened to shew the adhesion of its extremity to the cæcum, and there is a continuity of surface between the inner membrane of the ilium and of the cæcum.

In the individual from whom the two preceding specimens were taken, a large portion of the ilium having been discharged in a gangrenous state, the remaining part of it has become adherent to the cæcum. In this way the continuity of the intestine is preserved. Presented by Wm. Radnor, esq.

FIFTEENTH SERIES.

DISEASES AND INJURIES OF THE LIVER.

- 1 PORTION of the Liver of a child deeply and extensively lacerated.
The consequence of a blow upon the abdomen.
- 2 Cyst within the substance of the Liver, containing hydatids of various sizes. The structure of the liver is apparently healthy.
- 3 Cyst within the substance of the Liver, containing hydatids of various sizes. The structure of the liver is diseased and presents universally the appearance of small interstitial depositions.
- 4 Cyst within the substance of the Liver, of a cartilaginous texture. Within this cyst there was a second cyst of a membranous nature. This membranous cyst has broken into two portions, one of which is suspended in the bottle, and the other lies at the bottom of it. The internal surface of the membranous cyst is covered with depositions of adipose matter.
- 5 Portion of the Liver enveloped by a thick layer of cartilaginous substance. This substance is but slightly adherent to the liver. A portion of it is reflected to shew the surface of the liver beneath it, which is smooth and polished.
- 6 Section of the Liver, exhibiting a large, circumscribed deposition of a soft substance of a brown colour and medullary texture.
From the same individual as No. 43 in Diseases of the Testicle, and No. 5 in Diseases of the Intestines.
- 7 Portion of the Liver, exhibiting adhesions of its peritoneal covering to the diaphragm.

- 8 Large Cyst, containing hydatids which was attached to the Liver. The lining of the cyst presents an uneven and pulpy surface from a deposition of coagulable lymph upon it.
- 9 Abscess in the Liver.
- 10 Section of the Liver, exhibiting a growth of medullary matter from the lining of the trunk and branches of the vena portæ.
- 11 Section of the Liver, exhibiting several circumscribed portions of different sizes which have become of a black, fungous, and reticulated texture. Upon a close examination of this specimen, there will be seen on one of the cut surfaces, other circumscribed portions differing from the natural colour of the organ and changed from the healthy structure. These may perhaps be regarded as the commencement of the alteration which afterwards passes into the black fungous state.

Case of Fungus Hæmatodes, described by Mr. Langstaff. *Medico-Chirurgical Transactions*, vol. iii. p. 277.
- 12 Section of the Liver, almost entirely changed in its structure, with distinct tubercles in its substance.
- 13 Section of the Liver, exhibiting depositions of soft medullary matter diffused through its substance. The intervening parts of the liver are healthy. The limits of the healthy and diseased structure are shewn by the injection, which has only penetrated the former.
- 14 Section of the Liver, exhibiting depositions of soft medullary matter more circumscribed than in the preceding specimen. The limits of the healthy and diseased structure are shewn by the injection, which has only penetrated the former.
- 15 Section of the Liver, exhibiting a white interstitial deposition throughout its substance. The external surface of the organ is tuberculated.
- 16 Section of the Liver, exhibiting numerous depositions of white matter throughout its substance. The limits of the healthy and morbid structure are shewn by the injection.
- 17 Section of the Liver, exhibiting depositions of soft medullary matter, some of which are diffused, others circumscribed.
- 18 Section of the Liver, in which there are several large white tubercles of a soft texture. The intervening substance of the organ is healthy.
- 19 Section of the Liver, in which there are depositions of white and very firm substance. The intervening structure of the organ is healthy.

- 20 Section of the Liver, in which there is a deposition of a firm, yellow substance indefinitely diffused through it. At the upper part of the specimen, there are a few spots of a darker colour, which constitute all that remains of the healthy structure.
- 21 Section of the Liver, in which there are minute depositions of a yellow and firm substance. The external surface of the organ is tuberculated.
- 22 Section of the Liver, exhibiting white interstitial depositions in its substance.
- 23 Sections of the Liver, in the substance of which there are numerous depositions consisting of a soft cellular tissue filled by a black fluid. (Melanosis.)
From the same individual as No. 7 in Diseases of the Eye.
- 24 Cyst in the Liver, which contained bile. The sides of the cyst are of a cartilaginous texture. The surrounding substance of the organ is healthy.

SIXTEENTH SERIES.

DISEASES OF THE GALL BLADDER, AND OF THE BILIARY DUCTS.

- 1 DUCTUS Hepaticus and Ductus Choledochus enlarged in consequence of the lodgment of calculi in them.
- 2 Biliary Calculus of large size, lodged in the ductus choledochus, and one of smaller size in the ductus cysticus.
- 3 Effusion of Lymph from the lining of the gall bladder.
- 4 A growth of soft substance of a medullary texture from the lining of the gall bladder.
- 5 Complete obliteration of the Ductus Cysticus. The coats of the ductus hepaticus and of the ductus choledochus for some way down are considerably thickened. The gall bladder is much dilated; it contained a whey-like fluid.
- 6 A growth of soft substance of a medullary texture from the lining of the gall bladder.
- 7 The Ductus Choledochus compressed by a cyst which contained hydatids. The absorbent glands in the lesser omentum are enlarged and changed in structure. A bristle is passed into the compressed duct.
- 8 Gall Bladder, exhibiting changes of structure resulting from the lodgment of a calculus within it. Its coats are generally thickened. Its internal surface is rough, and at some points ulcerated. A piece of whalebone is passed into the cystic duct, which is very much contracted.

- 10 Gall Bladder filled by a Calculus, which is firmly adherent to its internal surface. The ductus cysticus is pervious.
- 11 Dilatation of the Ductus Hepaticus and Ductus Choledochus from the passage of calculi through them.
- 12 Portion of Liver with the Gall Bladder, Biliary Ducts, and a portion of the Duodenum. In the upper part of the preparation is the gall bladder thickened and contracted. A passage is formed by ulceration between the gall bladder and the duodenum, through which a large calculus passed into the intestine. The ductus hepaticus and ductus choledochus are much dilated. A portion of quill is passed from the ductus choledochus through the ductus cysticus into the gall bladder. Another portion of quill is passed from the ductus choledochus into the duodenum.

SEVENTEENTH SERIES.

DISEASES AND INJURIES OF THE SPLEEN.

- 1 Cartilaginous excrescences growing from the capsule of the Spleen.
- 2 General Cartilaginous Thickening of the capsule of the Spleen.
- 3 Small Tubercles deposited throughout the substance of the Spleen.
- 4 Circumscribed depositions of Scrofulous matter in the Spleen. The intervening substance of the organ is sound.
- 5 Spleen of a Child deeply and extensively lacerated.
The consequence of a blow upon the abdomen.
- 6 Sections of the Spleen, containing depositions of soft medullary matter. The intervening substance of the organ is healthy.
- 7 Spleen of a Child, having small white tubercles dispersed through its substance.

EIGHTEENTH SERIES.

DISEASES AND INJURIES OF THE NOSE, MOUTH, PHARYNX, AND ŒSOPHAGUS.

- 1 Enlargement of one Tonsil, with deep and irregular ulceration of its substance.
- 2 Deep and extensive Ulceration, which has removed the Epiglottis, and has destroyed the upper part of the larynx with the back part of the tongue.
- 3 Ulceration which has removed the Epiglottis and has extended to the upper part of the larynx.
- 4 Growth of soft Fungous Substance from the palate and tonsils.
- 5 Stricture of the Œsophagus at its upper end. Immediately above the stricture, the mucous membrane is irregularly ulcerated.
- 6 Stricture of the Œsophagus at its lower end, with thickening and ulceration of the mucous membrane.
- 7 Irregular thickening and ulceration of the lower part of the Œsophagus. The ulceration has extended into the right bronchus.
- 8 Irregular and extensive Ulceration, which has destroyed the lower part of the Œsophagus and a portion of the stomach.
- 9 Growth of Fungus from the mucous membrane of the Œsophagus.
- 10 Portion of the Tongue, which was detached by the teeth during an epileptic fit.
- 11 A Tumor removed from the palate, which consists of a firm cartilaginous substance with specks of bone.

- 12 A large Tumor of a soft medullary texture, attached to the upper and back part of the pharynx. The tumor entirely fills the pharynx, and is closely united to it on each side; it projects forwards into the mouth below the soft palate, and backwards through the pharynx to the spine, and a portion of it passes downwards behind the œsophagus.
- 13 Polypi removed from the Nose. They are soft, and most of them were attached to the pituitary membrane by a narrow pedicle.
- 14 Section of a Tumor formed in the face. The greater part of the diseased growth occupies the situation of the bones of the upper jaw, which are completely absorbed. Above, the tumor has extended through the basis of the skull into its cavity, where it forms a considerably projecting mass, occupying the situation of the anterior lobes of the brain. Below, the tumor is united to the soft palate. In front, it distends the left nostril, and has caused the ulceration of a part of the integuments of the face. The divided surface of the tumor exhibits partly a cartilaginous and partly a soft fungous structure; its external surface, projecting below the nostril, exhibits a sloughing appearance.
- 15 The other half of the section of the preceding Tumor. The diseased structure is here seen to have extended itself into the cavity of the right orbit. The optic nerve is elongated, and displaced from its natural situation; it lies close to the outer side of the orbit.
- 16 Deposition of Lymph upon the mucous membrane of the pharynx and œsophagus.
- 17 Extensive and ragged Ulceration in the mucous membrane of the pharynx and upper part of the œsophagus. At one point the ulceration has penetrated through the sides of the œsophagus and trachea into the cavity of the latter. A bristle is passed into the aperture of communication between the trachea and œsophagus.
- 18 Extensive destruction, apparently by sloughing, of the mucous membrane of the pharynx. Upon the epiglottis and around it, the mucous membrane is ulcerated.

These morbid changes were considered to have been occasioned by mercury.
- 19 A Tumor of a soft medullary texture, filling the antrum and nostrils, and protruding externally upon the cheek in the form of a fungus, sloughing on its surface.
- 20 Polypi which were removed from the nose. They were of a gelatinous but firm consistence. With one of the polypi, a considerable portion of the inferior spongy bone is connected.
- 21 Polypi of a gelatinous consistence, attached to the body of the sphenoid bone, and thence extending downwards into the back part of the nose.

- 22 Sections of a Carcinomatous Tongue. The change of structure has taken place in the basis and centre of the tongue, and there was a hard tubercle projecting on its upper surface. The diseased structure is very firm, with lines dispersed through it, and it is irregularly blended with the surrounding muscular substance. The left tonsil has ulcerated. A bristle is passed through an artery distributed to the tonsil, from which a considerable hæmorrhage occurred just before death.
- 23 A Tongue, the under part of which is completely destroyed by ulceration. Around the ulcerated surface, the muscular substance has undergone no obvious change of structure.
- 24 A Tumor of a soft medullary texture filling the antrum, and thence extending into the nostrils, and into the cavities of the mouth and orbit.

Presented by J. H. B. Williams, esq.

NINETEENTH SERIES.

DISEASES OF THE LARYNX, TRACHEA, AND THYROID GLAND.

- 1 LARYNX, exhibiting necrosis and separation of one of the arytaenoid cartilages.
- 2 Larynx, exhibiting a thickening of the mucous membrane, covering the cordæ vocales to the extent of almost closing the rima glottidis.
- 3 Irregular thickening and superficial ulceration of the mucous membrane, covering the epiglottis, larynx, and trachea.
- 4 Larynx, exhibiting the destruction of great part of the thyroid, cricoid, and arytaenoid cartilages by ulceration.
- 5 Ossification of portions of the Thyroid Gland.
- 6 Enlargement of the Thyroid Gland, constituting Bronchocele. The gland is divided to shew its internal structure, which consists of cells varying in size and filled by gelatinous substance.
- 7 Section of a Bronchocele, which has been injected. Its internal structure is the same as that which has been described in the preceding specimen.
- 8 Larynx, exhibiting ulceration of the mucous membrane extending into the cricoid cartilage. Around the ulcer, the mucous membrane is thickened and puckered.
- 9 Larynx, exhibiting necrosis and separation of the arytaenoid and of part of the cricoid cartilages. The mucous membrane covering the cordæ vocales is thickened. The irregular opening in the front of the trachea was made during life for the relief of respiration.

Case described by Mr. Lawrence. *Medico-Chirurgical Transactions*, vol. vi. p. 223.

- 10 Larynx and Trachea. Within the larynx is a deep ulcer, which is marked by a bristle. The mucous membrane covering the whole of the larynx and trachea, is thickened and rough on its internal surface.

These morbid changes are consequent on Small Pox.

- 11 Larynx and Trachea, exhibiting the peculiar changes consequent on croup. A continuous layer of lymph is deposited upon the mucous membrane covering the larynx, trachea, and bronchi.

- 12 Larynx and Trachea. From a man in whom the operation of tracheotomy was performed several years before death. The orifice in the trachea is situated immediately below the cricoid cartilage. The rima glottidis was narrowed by the thickening of the mucous membrane covering the cordæ vocales. There does not appear to have been any other disease in the larynx.

- 13 Deposition of lymph upon the mucous membrane of the larynx and trachea.

The consequence of Small Pox.

- 14 Thickening, with Ulceration, of the mucous membrane covering the epiglottis and the larynx.

From an individual in whom Elephantiasis existed.

- 15 Larynx, Trachea, and Bronchi, exhibiting the peculiar changes consequent on croup. The mucous membrane is covered by an abundant deposition of lymph, which extends from the larynx into the branches of the bronchi. The aperture in the upper part of the trachea was made during life for the relief of respiration.

Presented by Herbert Evans, esq.

- 16 Larynx, in which an abscess formed around the thyroid cartilage. Part of the cartilage is destroyed by ulceration, and there is a communication between the abscess and the interior of the larynx.

- 17 Portion of a Thyroid Gland converted into bone.

- 18 Thyroid Gland. One of its lateral lobes is much smaller than natural. Its other lateral lobe is enlarged and in part converted into a cartilaginous substance, with specks of bone dispersed through it.

- 19 Larynx, to which a tumor is attached consisting of a soft caseous substance. In one part of the tumor there is a cavity which was filled by pus. A growth of fungus has also taken place from the mucous membrane of the larynx and pharynx.

Presented by G. Macilwain, esq.

TWENTIETH SERIES.

DISEASES OF THE KIDNEY.

- 1 Cyst formed in the substance of the kidney, which contained water.
- 2 Kidney formed into a sac by the dilatation of the pelvis and infundibula, and the absorption of the greater part of its substance.
- 3 Kidney, in which there is enlargement of the ureter, pelvis, and infundibula, with absorption of a great part of its substance.
- 4 Kidney, in which the canal of the ureter is contracted at its commencement to such an extent that it will only admit the passage of a bristle. The pelvis and infundibula are considerably enlarged, and there is an almost total absorption of the substance of the organ.
- 5 Kidney which is much enlarged, in consequence of the lodgement of a calculus at the commencement of the ureter. The infundibula are greatly dilated; the mucous lining and substance of the organ are changed in structure. Portions of whalebone are introduced through two ulcerated apertures leading from the kidney to the descending colon. The portion of the colon, which thus communicates directly with the interior of the kidney, exhibits numerous small ulcerations on its mucous membrane. At the lower end of the kidney is an ulceration of its substance.
- 6 Kidney, in which there is an enlargement of the pelvis and infundibula, with thickening of the mucous membrane.
- 7 Kidney, in which there is enlargement of the pelvis and infundibula with deposition of caseous matter on their mucous surface.

- 8 Kidney, the pelvis and infundibula of which are dilated and filled by calculi. There is one large calculus in the pelvis, and branches from it are continued into some of the infundibula. Smaller calculi fill the other infundibula.

Represented by Dr. Marcet. *Essay on Calculous Disorders. Pl. 2.*

- 9 Kidney, in which there is a calculus lodged in the commencement of the ureter. The kidney is much increased in size, and its substance is changed throughout. The pelvis and infundibula are greatly dilated, and the mucous membrane lining them is roughened apparently by a morbid deposition upon its surface.
- 10 Kidney, considerably reduced in size by the almost complete absorption of its glandular substance. The ureter is obliterated at its commencement. The other kidney of the same individual was healthy in structure, but nearly twice the natural size.
- 11 Kidney, studded near its external surface with black spots. A portion of the capsule is separated to shew that the spots are in the substance of the kidney.
- 12 Section of a Kidney, greatly enlarged, and converted throughout into a soft medullary substance intermixed with blood.
- From a child about ten years of age.
- 13 Section of a Kidney, the pelvis and infundibula of which are dilated. The mucous membrane lining the infundibula, pelvis, and ureter, is thickened, and granulated on its surface.

TWENTY-FIRST SERIES.

DISEASES OF THE SCROTUM.

- | | |
|---|--|
| 1 | Scrotum greatly increased in size. There is no evident change of structure either in the skin or subjacent cellular tissue. |
| 2 | Scrotum considerably enlarged, with induration of the skin and subjacent cellular tissue. The skin is formed into hard irregular folds separated by deep fissures. |
| 3 | Portion of the Scrotum exhibiting the peculiar change of structure denominated the chimney-sweeper's cancer. The skin is indurated and formed into irregular eminences, which are in progress of ulceration. |
| 4 | Portion of the Scrotum exhibiting the same change of structure as No. 3. |

TWENTY-SECOND SERIES.

DISEASES OF THE TESTICLE, ITS COVERINGS, AND OF THE SPERMATIC CORD.

- 1 Tunica Vaginalis enlarged, and very much thickened, with the deposition of a soft and dark coloured substance upon its internal surface. The testicle is healthy.
- 2 Hydrocele, with the conversion of the Tunica Vaginalis into a cartilaginous substance. The testicle is healthy. The spermatic vessels are separated, the vas deferens and the spermatic artery being placed close together, and at some distance from the spermatic veins.
- 3 Hydrocele in the Spermatic Cord. There are several cysts of different sizes, and communicating with each other..
- 4 Tunica Vaginalis thickened, and filled with masses of soft fibrous substance. The testicle is healthy.
- 5 Hydrocele. The tunica vaginalis is converted throughout into a cartilaginous substance, with which small portions of bone are intermixed.
- 6 Hydrocele. The tunica vaginalis and testicle are injected. The testicle is divided to shew that its structure is healthy.
- 7 Hydrocele with thickening of the tunica vaginalis.
- 8 Hydrocele with thickening of the tunica vaginalis. A thick membranous partition with which the testicle is connected, extending transversely across the centre of the tunica vaginalis, separates it into two cavities.

- 9 Tunica Vaginalis enlarged and thickened, in consequence of suppuration in its cavity. Its internal surface is granulated and very vascular. The testicle is enlarged and indurated.
- 10 Hydrocele in the Spermatic Cord. There is one large membranous cyst immediately above the testicle. The tunica vaginalis was adherent throughout to the tunica albuginea, from which it has been partly separated. The testicle is healthy.
- 11 A large cyst in the Spermatic Cord, which contained blood. The tunica vaginalis has been in part removed; it was adherent throughout to the tunica albuginea.
- 12 Testicle, enlarged and converted into a soft medullary substance. The tunica vaginalis is adherent throughout to the tunica albuginea.
- 13 Testicle, enlarged and converted into a soft medullary substance. The tunica vaginalis is partially adherent to the tunica albuginea.
- 14 Testicle, enlarged and converted into a soft medullary substance. The tunica vaginalis is partially adherent to the tunica albuginea.
- 15 Section of a Testicle enlarged and converted into a soft medullary substance. The tunica vaginalis is partially adherent to the tunica albuginea. A fungus arising from the testicle has protruded through an ulcerated opening in its coverings and in the scrotum.
- 16 Testicle, enlarged and converted into a firm fleshy substance. The tunica vaginalis is generally adherent to the tunica albuginea. Injection displays the vascularity of the morbid structure only in some situations.
- 17 Section of a Testicle enlarged and converted into a fleshy substance, intermixed with portions of cartilage.
- 18 Testicle, enlarged and converted into a firm fleshy substance. The tunica vaginalis is partially adherent to the tunica albuginea. Injection displays the partial vascularity of the morbid structure.
- 19 Two Testicles, (probably from the same individual,) enlarged and converted into a fleshy substance, with small cells dispersed through it.
- 20 Testicle, enlarged and converted into a fleshy substance, in which there are irregular cavities. Injection displays the partial vascularity of the morbid structure.
- 21 Testicle, with a portion of the Scrotum. The testicle and a fungus which has arisen from it are protruded through an ulcerated aperture in the scrotum. What remains of the natural structure of the testicle is imbedded in the fungus at its back part.

- 22 Testicle, exhibiting a deposition of scrofulous substance in the centre of the gland. The other testicle of the individual was in a similar state.
- 23 Hydrocele, with thickening of the Tunica Vaginalis, and the growth of fleshy excrescences from its internal surface.
- 24 Testicle, enlarged and converted into a fleshy substance, in which there are irregular cavities.
- 25 Testicle, much diminished in size, in consequence of the pressure of a hydrocele on the opposite side.
- 26 Testicle much diminished in size.
From an old subject.
- 27 Testicle, with a portion of the Scrotum. The testicle is protruded through an ulcerated aperture in the scrotum. A section has been made of the protruded testicle to shew that its glandular substance is but little altered.
- 28 Hydrocele in the Spermatic Cord. There are three cysts which do not communicate. Two of these are situated above the testicle, and the third behind it.
- 29 The Glandular substance of a Testicle, which was protruded through an ulcerated aperture in the scrotum.
- 30 Testicle, with the Inguinal Absorbent Glands. The testicle is enlarged and converted into a medullary substance. The absorbent glands have undergone the same change of structure.
- 31 Section of a Testicle, enlarged and converted into a soft medullary substance. The deposition of medullary substance is continued into the spermatic cord. The tunica vaginalis is generally adherent to the tunica albuginea.
- 32 Testicle, enlarged and converted into a firm white substance. The same kind of substance is deposited in the cellular tissue of the spermatic cord. The tunica vaginalis is generally adherent to the tunica albuginea.
- 33 Testicle, exhibiting depositions of scrofulous substance in the epididymis. The vas deferens is obliterated.
- 34 Testicle, enlarged and indurated, with small abscesses in its glandular substance.
- 35 Testicle, with a portion of the Scrotum. The testicle is enlarged and indurated, and its glandular substance is protruded through an ulcerated aperture in the scrotum.

- 36 Testicle, enlarged and converted into a soft medullary substance mixed with blood. The tunica vaginalis is generally adherent to the tunica albuginea.
- 37 Testicle, enlarged and converted into a soft substance with small cells dispersed through it. Some of the cells are filled by blood, others by a gelatinous substance. The tunica vaginalis is not adherent to the tunica albuginea.
- 38 Two Testicles from the same individual, exhibiting depositions of scrofulous matter in the glandular substance.
- 39 Testicle, from a child, seven years of age. The testicle is enlarged and indurated, and it is protruded through an ulcerated opening in the scrotum.
- 40 Testicle, with a portion of the abdominal muscles. The testicle is converted into a soft brown medullary substance. The tunica vaginalis communicated with the cavity of the abdomen.
- From the same individual as No. 5 in Diseases of the Intestines, and No. 6 in Diseases of the Liver.
- 41 Hydrocele in the Spermatic Cord. There is a single cyst immediately above the testicle.

TWENTY-THIRD SERIES.

DISEASES OF THE URINARY BLADDER.

- 1 Bladder of a female. The mucous membrane is completely destroyed by ulceration.
- 2 Bladder, exhibiting a soft medullary fungus growing from the mucous membrane near the fundus.
- 3 Bladder, in which there has been ulceration of the mucous membrane around the orifice of the urethra.
- 4 Bladder, exhibiting the growth of firm fleshy tumors between its coats at the fundus. One tumor projects into the cavity of the bladder. Another projects upon the outer surface of the bladder.
- 5 Bladder, exhibiting the growth of fungus from the greater part of its mucous membrane. Upon some of the fungous growth, calculous matter is deposited.
- 6 Bladder, exhibiting several fungous growths from its mucous membrane.
- 7 Bladder, exhibiting the growth of a large mass of loose and flocculent fungus from the mucous membrane.
- 8 Bladder, with the Ureters and one Kidney, from a boy aged about ten years. The bladder is much thickened. Both ureters are contracted to the extent that they would only admit the passage of a probe, just before their terminations in the bladder. Above these contractions, both ureters in the rest of their extent are widely dilated. The pelvis and infundibula of the kidney are much dilated.

Presented by S. G. Lawrance, esq.

- 9 Bladder, with the Ureters, and Kidneys. The bladder is thickened, and it contains a calculus. The ureters, pelvis, and infundibula of the kidneys are widely dilated.
- 10 Bladder, exhibiting a large sac connected with its posterior part, and communicating with its cavity by a small round opening. A portion of the sac has been removed. The bladder is much thickened. Above the communication of the bladder with this sac, is an orifice in the bladder which was made by a trochar introduced from the rectum during life. There is a smaller sac communicating with the bladder a little above the termination of one of the ureters.
- 11 Bladder, the coats of which are much thickened and converted into a cartilaginous substance, in consequence of the lodgment of a calculus in its cavity. The incision in the lower part of the bladder was made during life in the performance of the operation of lithotomy.

Presented by Charles Mayo, esq.
- 12 Bladder, Ureters, and Kidneys of a child upon whom the operation of lithotomy was performed a few days before death. The bladder is contracted and thickened. The ureters, pelvis, and infundibula of the kidneys are widely dilated.
- 13 Bladder, Urethra, and a portion of the Os Pubis, from an individual upon whom the operation of lithotomy had been performed. A portion of the front of the bladder is destroyed by ulceration; the remaining part of the bladder is greatly thickened. A large calculus is lodged within the prostate gland.
- 14 Bladder of a child. The muscular coat is greatly thickened.
- 15 Bladder, exhibiting a general thickening of its coats with the growth of a large mass of soft medullary substance from the mucous membrane. A large sac filled with the same sort of medullary substance communicates with the lower and posterior part of the bladder. One of the ureters terminates in this sac by an opening through which a quill is passed. A passage has been formed through the prostate gland by a silver catheter.
- 16 Bladder, contracted and thickened, with ulceration of its posterior part, and the formation of a passage from its cavity into the rectum. This passage is laid open for the purpose of shewing a calculus which is lodged within it. The ureters are dilated, and there is a small calculus lodged in each ureter just before its termination in the bladder. The mucous membrane of the rectum is formed into thick and hard folds. The calculi at the bottom of the bottle were found in the bladder.

Presented by James Gillman, esq.

- 17** Bladder, exhibiting numerous cysts of various sizes communicating with its cavity. Within two of these cysts calculi are lodged. Fifteen calculi of various sizes were found in the cavity of the bladder.
- 18** Bladder, with the rectum, from a child upon whom the operation of lithotomy had been performed about a fortnight before death. A bristle is passed through the tract of the wound.
- 19** Bladder, exhibiting the complete destruction of its mucous membrane by ulceration.
- 20** Bladder, exhibiting the complete destruction of its mucous membrane by ulceration, with thickening of the muscular fibres.
- 21** Bladder, exhibiting a rupture of its anterior part in a line from the prostate gland to the fundus.
The consequence of external violence. From the same individual as No. 71 Diseases of Arteries, and No. 51 Diseases of the Intestines.
- 22** Bladder, exhibiting a thickening of its muscular coat, with enlargement of the prostate gland, and the lodgment of three large calculi in its cavity immediately above the prostate.
Presented by J. H. Spry, esq.
- 23** Bladder and Kidneys, from an individual upon whom the operation of lithotomy had been performed eight years before death. The cicatrix in the mucous membrane within the prostate and neck of the bladder is distinctly visible, and there is a membranous band extending across the cicatrix, between the front and back parts of the prostate. One kidney is much reduced by the absorption of its glandular substance. Its infundibula, pelvis, and a portion of the ureter, are filled by a large calculus. In the other kidney, the infundibula are dilated and filled by several calculi.

TWENTY-FOURTH SERIES.

DISEASES OF THE PROSTATE GLAND AND VESICULÆ SEMINALES.

- 1 Prostate Gland greatly enlarged and converted into a firm fleshy substance. The urethra, within the prostate is flattened laterally, and contracted. A portion of glass is introduced into a passage made by a trochar during life, from the rectum through the prostate gland into the urethra.
- 2 Prostate Gland enlarged and converted into a firm fleshy substance. The urethra within the prostate is contracted and turned from its regular direction by two portions of the gland projecting into the canal.
- 3 Prostate Gland greatly enlarged and converted into a firm fleshy substance. The urethra within the prostate is considerably deepened and compressed laterally. The muscular coat of the bladder is greatly thickened. The fibrous cords continued from the ureters to the neck of the bladder are also thickened.
- 4 Prostate Gland, exhibiting numerous small cells in its interior filled by calculi.
- 5 Prostate Gland, exhibiting numerous very small cells in its interior, filled by calculi.
- 6 Prostate Gland, exhibiting an enlargement of its middle lobe in the form of a round tumor projecting into the cavity of the bladder, immediately behind the orifice of the urethra. The muscular coat of the bladder is much thickened. The ureters are greatly dilated and thickened. Immediately above one of the ureters there is a small cyst communicating with the bladder.

- 7 Prostate Gland, exhibiting an enlargement of its middle lobe in the form of a round tumor projecting into the bladder immediately behind the orifice of the urethra.
- 8 Prostate Gland, exhibiting an enlargement of its lateral and middle lobes with thickening of the bladder. The enlarged middle lobe of the prostate forms a ridge across the neck of the bladder, through which a passage has been formed by a catheter.
Presented by R. S. Eyles, esq.
- 9 Prostate Gland, enlarged, with the growth of tumors from it which projected into the bladder. There was a calculus in the bladder which was removed by the lateral operation a fortnight before death, and in the progress of the operation, one of the tumors arising from the prostate was completely detached. This tumor is suspended in the lower part of the bottle.
- 10 Prostate Gland, exhibiting two deep cavities in its substance formed by ulceration, and communicating with the urethra. Urinary calculi have formed in these cavities.
- 11 Prostate Gland, greatly enlarged, with mortification of the bladder at its fundus, in consequence of retention of urine. Fungous excrescences arising from the prostate, project into the cavity of the bladder. A passage has been formed through the prostate by a catheter. The muscular coat of the bladder is thickened, and its mucous membrane is ulcerated. At the upper and back part of the bladder is a large irregular aperture formed by the sloughing of its coats, and through which the urine escaped into the abdomen. The rectum is very much curved in its progress beneath the enlarged prostate.
- 12 Prostate Gland, exhibiting an enlargement of its lateral and middle lobes. The enlarged middle lobe forms a round tumor projecting into the cavity of the bladder. Upon the surface of this tumor there is ulceration. Several small cysts apparently formed by the protrusion of the mucous membrane between the muscular fibres, communicate with the cavity of the bladder.
- 13 Prostate Gland enlarged, with the growth of fungous excrescences from the mucous membrane of the bladder, around the orifices of the ureters.
- 14 Two specimens of vesiculæ seminales converted into a firm fleshy substance.
- 15 Bladder, with a cyst attached to its posterior part which contained hydatids. The vesiculæ seminales and vasa deferentia are closely connected with the cyst. One vas deferens communicates with the cyst by two orifices into which a bristle is passed. A portion of this vas deferens is wanting, hence it appeared that the cyst might have originated in the dilatation of the deficient portion of the tube. The sides of the cyst are of a cartilaginous texture. The hydatids found within it are at the bottom of the bottle.

TWENTY-FIFTH SERIES.

DISEASES OF THE PENIS AND URETHRA.

- 1 Stricture in the Urethra in front of the bulb. The canal is almost obliterated to the extent of half an inch.
- 2 Stricture in the Urethra, about two inches from the external orifice. Behind the stricture, there is a thickening and dilatation of the canal with an ulcerated aperture, which is the commencement of a fistulous passage, resulting from the escape of urine into the surrounding parts.
- 3 Stricture in the Urethra, about two inches anterior to the bulb. The canal is dilated behind the stricture.
- 4 Stricture in the Urethra, at the bulb. The inner membrane of the canal is ulcerated at the seat of the stricture.
- 5 Stricture in the Urethra, about three inches from the external orifice. Ulceration of the urethra has taken place at the seat of the stricture, and at some distance behind it. Numerous fistulous passages extend from the urethra into the surrounding parts.
- 6 Stricture in the Urethra, about an inch anterior to the bulb. A passage has been made by a catheter through the urethra into the corpus cavernosum. A small calculus is lodged in one of the prostatic ducts at its termination.

- 7 Stricture in the Urethra, with thickening of the muscular coat, and ulceration of the mucous membrane of the bladder. The stricture is situated about three inches anterior to the bulb. At the fundus of the bladder there is a cyst formed by the protrusion of the mucous membrane between the muscular fibres.
- 8 Stricture in the Urethra, with fistulous canals leading from the bulb to the perineum. A part of the integuments is left with which the external opening of one of the fistulous canals is connected. The stricture, commencing an inch anterior to the bulb, is continued to the prostate gland. The muscular coat of the bladder is thickened. One of the ureters is dilated into a small cyst at its termination in the bladder.
- 9 Stricture in the Urethra, immediately before the bulb, with thickening of the muscular coat of the bladder. The muscular fibres project upon the internal surface of the bladder. The fibrous cords continued from the ureters are considerably thickened.
- 10 Urethra and Bladder. The mucous membrane of the bladder and of the urethra is thickened in its whole extent. Several small ulcerated openings have formed in the spongy part of the urethra. The cut surfaces of the corpus cavernosum exhibit a sloughing appearance, in consequence of the escape of urine into it. The glans penis has been entirely removed by ulceration.
- 11 Urethra and Bladder. A calculus is lodged in the urethra at the bulb. There is a stricture in the urethra immediately in front of the calculus, and behind it, the urethra is dilated. The coats of the bladder are greatly thickened. One of the lateral lobes of the prostate gland is enlarged.
- 12 Urethra and Bladder. There are two ulcerated openings in the urethra anterior to the bulb. One of these openings communicates with a sac formed by thickening of the cellular tissue around the urethra. The muscular coat of the bladder is greatly thickened. The cavity of the bladder was lined throughout by a thick layer of lymph, upon which, calculous matter was deposited. This lymph was but loosely connected with the mucous membrane of the bladder, from which it has been separated.
- 13 Urethra and Bladder. There is stricture in the urethra immediately before the bulb. From the bulb to the bladder the mucous membrane of the urethra is ulcerated in some situations, and in others covered by fungous excrescences. The bladder is thickened and contracted, and its cavity is filled by fungous excrescences arising from its mucous membrane. Upon these fungous excrescences, calculous matter is deposited.
- 14 Cast of the urethra, exhibiting a circular contraction of the canal immediately behind the bulb.

- 15 Urethra and Bladder. There is stricture in the urethra to the extent of an inch immediately before the bulb. The muscular coat of the bladder is greatly thickened.
- 16 Urethra and Bladder. There is stricture in the urethra at the bulb. The mucous membrane has ulcerated in the situation of the stricture. The muscular coat of the bladder is greatly thickened. The mucous membrane is thickened and formed into irregular eminences which are covered by calculous matter. Ulceration has taken place through the coats of the bladder at its lower and back part. Connected with the outside and back part of the bladder, there is a large irregular cavity resulting from the effusion of urine into the cellular tissue between the bladder and the rectum.
- 17 Urethra and Bladder. There has been sloughing of the urethra to the extent that five inches of the canal with the corpus spongiosum are completely destroyed. The muscular coat of the bladder is greatly thickened. A large cyst is connected with the front of the bladder which seems to have been formed by the protrusion of the mucous membrane between the muscular fibres.
- 18 Urethra with a portion of the bladder. The mucous membrane of the urethra is thickened in its whole extent. About two inches from its external orifice, the urethra is considerably contracted. From this contraction, a passage formed by a catheter, is continued along the outer side of the urethra, and through the prostate gland into the bladder.
- 19 Urethra and Bladder. There is a stricture in the urethra about an inch anterior to the bulb. The mucous membrane has been separated from the corpus spongiosum in the situation of the stricture to shew that it is here considerably thickened. The muscular coat of the bladder is thickened and the ureters are dilated.
- 20 Urethra, in which there is a stricture about an inch anterior to the bulb. The mucous membrane is considerably thickened in the situation of the stricture. A bristle is introduced into a passage, formed by a catheter, which extends from the stricture along the outer side of the urethra.
- 21 Urethra, in which there is a stricture about two inches and a half from the external orifice. Behind the stricture, the urethra in the rest of its extent to the bladder is greatly dilated and its sides are thickened. There are several small sacs close to the urethra. Two of these communicate with the canal near the prostate.
- 22 Urethra, the mucous membrane of which is thickened and of a tendinous structure. There are two strictures, one immediately before the bulb, the other about two inches from the external orifice.

- 23 Urethra, in which there are two strictures, one situated about two inches from the external orifice, the other just before the bulb. The mucous membrane is thickened, and at several points ulcerated.
- 24 Portion of a penis, in which the corpus cavernosum is converted into a firm fleshy substance. The glans penis with a part of the altered corpus cavernosum is removed by ulceration.
- 25 Glans Penis, exhibiting a large ulcer with a ragged irregular surface, extending into the urethra.
- 26 Portion of a penis, in which the glans with a part of the corpus cavernosum has been removed by ulceration.
- 27 Portion of a penis exhibiting the growth of verrucæ from the prepuce and from the surface of the glans.
- 28 Portion of a penis exhibiting the growth of a fleshy tumor in the prepuce which is in part removed by ulceration. A section of the morbid growth is made through its centre.
- 29 Portion of a penis exhibiting a fungous growth from the prepuce in its whole circumference. The glans, corpus cavernosum, and urethra are sound except in one situation where ulceration has commenced upon the surface of the glans.
- 30 Portion of a penis exhibiting a peculiar change of structure with ulceration in the prepuce, glans, and corpus cavernosum. This disease was considered to be cancer.

TWENTY-SIXTH SERIES.

DISEASES OF THE UTERUS, VAGINA, OVARY, AND FALLOPIAN TUBE.

- 1 Ovary enlarged and formed into three distinct cysts.
- 2 Portion of an Ovary very much enlarged, and converted into a fleshy and cellular structure.
- 3 Portions of Coagulable lymph, resembling the Decidua, which were discharged from the uterus in a painful menstruation.
- 4 The same as No. 3.
- 5 Section of a Uterus and of a Polypus which has grown from the whole circumference of its neck. A ligature was placed around the polypus at the line of its connexion with the uterus, but the death of the woman took place before the ligature had separated. A portion of glass occupies the groove in which the ligature was imbedded; and it will be observed, that this groove, in a part of its extent, is formed in the substance of the uterus. The polypus is of a firm fleshy structure, intersected by white lines.
- 6 Uterus, exhibiting the growth of tumors of various sizes beneath its peritoneal covering. The largest tumor is divided to shew its internal structure, which consists of a firm fleshy substance, surrounded by a complete cyst of bone. The substance of the uterus is healthy.

- 7 A Polypus Uteri which was removed by ligature. The polypus presents on that side which was attached to the uterus, an irregular surface, resulting from the process of its separation. A section of the polypus is made to shew its internal structure, which is firm and fleshy throughout.
- 8 Ovary enlarged, and formed into a cyst containing a mass of fat mixed with hair.
- 9 Fallopian Tube closed at its extremity, and dilated into a sac, which is filled by a transparent watery fluid. A bristle is passed from the cavity of the uterus into the dilated portion of the tube.
- 10 Section of the Uterus, shewing a firm fleshy tumor imbedded in its substance. The uterus is injected minutely; none of the injection has penetrated the morbid growth.
- 11 Section of a Tumor imbedded in the substance of the uterus; it consists of a firm fleshy structure, intersected by white bands.
- 12 Fallopian Tube closed at its extremity, and dilated into a sac, which is filled by a watery fluid.
- 13 Uterus, exhibiting the growth of firm fleshy tumors from its internal surface; one of these tumors was attached by a very thin pedicle which has given way, hence it has fallen to the bottom of the bottle.
- 14 Uterus, exhibiting the growth of a firm fleshy tumor from its internal surface. The tumor has a narrow neck, and its broader part extends into the vagina.
- 15 Uterus, exhibiting the growth of a large polypus from its internal surface. The polypus extends into the vagina. Ulceration has taken place on its most depending part.
- 16 Uterus, exhibiting the growth of a soft fungous excrescence from the whole of its internal surface, with ulceration extending from the uterus into the bladder.
- 17 Uterus, containing a large tumor which has grown from its internal surface at the fundus, and has projected into the vagina. Smaller tumors have formed, some upon the surface, and others in the substance of the uterus. The section of the large tumor shews that it consists of a firm fleshy substance. A portion of the fundus of the uterus, drawn downwards by the weight of the tumor, is elongated, so as to form a narrow pedicle. The uterus has been injected. Some of the injection has penetrated the tumors.
- 18 Vagina and Rectum, with the external parts of generation. The vagina, at the extremity which was connected with the uterus, presents in its whole circumference, a flocculent

appearance. The separation of the vagina from the uterus was by sloughing, consequent on the resting of the head of the child on the brim of the pelvis in a tedious parturition.

Presented by Dr. Conquest.

- 19 Uterus, exhibiting the obliteration of its cavity within the cervix.
- 20 Uterus, exhibiting ulceration of its cervix and of a considerable part of the vagina. From the vagina, ulceration has extended into the bladder. The ovaries consist throughout of a very solid fleshy structure.
- 21 Uterus, entirely changed from its natural form and structure; a section of the organ shews that it is converted throughout into a soft medullary substance; the os uteri presents a ragged fungous appearance.
- 22 Uterus and its appendages, exhibiting the Fallopian Tubes firmly adherent at their extremities to the ovaries.
- 23 A mass of small Membranous Vesicles, generally considered to be Hydatids, attached to a coagulum of blood discharged from the uterus. These vesicles are of an oval shape, and have a small process or stalk at one extremity.
- 24 Uterus, enlarged by the growth of numerous tumors in its substance. One tumor, larger than the rest, projects into the cavity of the uterus, and completely fills it; others project upon the external surface of the uterus. These tumors are of a firm fleshy structure, intersected throughout by white shining bands. The substance of the uterus between the tumors is healthy.
- 25 Uterus, Vagina, and Bladder, exhibiting changes which are the consequence of parturition. A large opening exists between the upper part of the vagina and the bladder. The margins of this opening are situated close to the terminations of the ureters, through which bristles are passed. The os uteri is completely closed.
- 26 A large Cyst connected with the broad ligament of the uterus. In the upper part of the preparation the connexion of the cyst with the broad ligament may be observed. There was no vestige of the ovary on this side. The cyst contained a transparent fluid, and it had no adhesions to the surrounding viscera.
- 27 Portion of a large Cyst which originated in the ovary. The cyst was filled by fat and hair. The sides of the cyst are in some parts cartilaginous, in others, membranous. To the internal surface of the cyst several teeth are firmly attached. These teeth possess a covering of enamel.
- 28 Mass of Hair which was found in the cyst of the ovary described No. 27.

- 29 Portion of the Cyst of the ovary described No. 27, exhibiting the growth of an adipose tumor from its internal surface. The exterior of this tumor is formed by a thick membrane closely resembling skin. From this membrane, and from the cyst itself, numerous hairs have originated. These hairs seemed to possess bulbs.
- 30 Fallopian Tubes with the Ovaries, taken from the same individual. A membranous cyst, which contained a transparent fluid, is connected with each Fallopian tube, near its fimbriated extremity. A bristle is passed through each tube to shew that it does not communicate with the cyst.
- 31 Uterus and Vagina, exhibiting the condition of these parts in the sixth week after they had been lacerated during parturition. The laceration extends through the posterior side of the vagina and the neck of the uterus. The edges of the opening exhibit no appearance of granulation. A band of lymph extends from the vagina to the rectum.
Case of laceration of the Uterus described by Mr. Birch. *Medico-Chirurgical Transactions*, vol. xiii. p. 357.
- 32 Mass of Membranous Vesicles, generally considered to be Hydatids, expelled from the Uterus.
Presented by Dr. Conquest.
- 33 The same as No. 32.
Presented by Dr. Conquest.
- 34 Uterus and Vagina, exhibiting a rupture of the latter which occurred in parturition. The vagina is torn in half of its circumference, and close to its connexion with the uterus.
Presented by Dr. Conquest.
- 35 Uterus enveloped by a diseased mass, which in some situations consists of distinct tumors of a soft texture. Ulceration has occurred in the neck of the uterus and in the contiguous part of the vagina.
Presented by Dr. Conquest.
- 36 Uterus and Vagina, exhibiting the complete destruction of their mucous lining by ulceration, which was considered to be malignant.
Presented by Dr. Conquest.
- 37 Uterus, exhibiting the complete destruction of its cervix and of part of the vagina by ulceration, which was considered to be malignant.
Presented by Dr. Conquest.

- 38 Uterus ruptured in parturition. The neck of the uterus is torn in two thirds of its circumference. The child was born with hydrocephalus; its skeleton is preserved in the Museum.
Presented by Dr. Conquest.
- 39 Uterus, exhibiting the growth of one large fleshy tumor in its substance.
Presented by Dr. Conquest.
- 40 Uterus, with which numerous fleshy tumors are connected. Some of them have apparently grown from the external surface of the uterus, others in its substance.
Presented by Dr. Conquest.
- 41 Uterus, exhibiting the destruction of its cervix and of part of the vagina by ulceration.
Presented by Dr. Conquest.
- 42 Ovarian Cyst (dried). The woman was tapped eighteen times in two years. Total quantity of fluid withdrawn, 468 pints.
Presented by Dr. Conquest.
- 43 Ovarian Cyst of very large size (dried).
- 44 Lower Limb of a Child which was contained in an osseous cyst, and remained in the abdomen fifty-two years. A portion of the cyst is connected with the limb.
Case described by Dr. Cheston: *Medico-Chirurgical Transactions*, vol. 5.

TWENTY-SEVENTH SERIES.

ABORTIONS.

- | | |
|---|--|
| 1 | Abortion, consisting of the fœtus and membranes. Many small fleshy tumors are formed between the membranes. |
| 2 | Abortion, consisting of the membranes with an umbilical cord, but no fœtus could be discovered.
Presented by Dr. Conquest. |
| 3 | Abortion, consisting of the fœtus and membranes. Fleshy tumors formed between the membranes, protrude into the cavity of the amnios. |

TWENTY-EIGHTH SERIES.

DISEASES OF THE MAMMARY GLAND.

- 1 Mammary Gland and a Tumor connected with it. The tumor consists of a cyst, having thin membranous sides. The cyst was distended by a watery fluid, and from its internal surface a fungus has arisen.
- 2 Portion of a Tumor which weighed eight pounds, and which occupied the situation of the mammary gland. The outer surface of the tumor is uneven. Internally, it consists of a firm white substance, contained in membranous cells, of irregular form and size.
- 3 Mammary gland, exhibiting a membranous cyst in its interior, which was filled by a watery fluid.
- 4 Sections of a Mammary Gland and of the surrounding fat, exhibiting the peculiar change of structure usually considered to be cancer.
- 5 Tumor and portion of skin connected with it, removed from the breast. The tumor is of a firm texture, and there are white lines radiating through it.
Presented by Dr. Conquest.
- 6 Tumor, removed from the breast. In some parts, it consists of a medullary substance; in others, it consists of cells filled with blood.
- 7 Mammary Gland, in the centre of which a cyst has formed. This cyst contained a serous fluid, and from its internal surface a soft, vascular tumor has arisen.

- 8 Tumor, removed from the breast of an aged female. It had been of a very slow growth. Its texture is moderately firm. There are no lines visible on the cut surface.
- 9 Sections of two Tumors. The largest tumor occupied the situation of the mammary gland. The smaller tumor seemed to be formed by the enlargement and change of structure of the axillary absorbent glands. The larger tumor consists of a moderately firm substance, upon the cut surface of which, no lines are visible. The smaller tumor consists of the same kind of substance, with a distinct portion of a dark brown colour and of a very soft texture.
From a female, aged sixteen.
- 10 Tumor which formed in the fat connected with the mammary gland. The tumor is of a firm, fleshy structure. Fungus has arisen from the skin covering it, and in the centre of this fungus is the orifice of an ulcerated channel, which extends through the tumor to its base.

TWENTY-NINTH SERIES.

VARIOUS MORBID PRODUCTS, TUMORS, CYSTS, HYDATIDS, &c.

- 1 Portion of a Skull-cap, exhibiting numerous depositions of soft medullary substance upon its external and internal surface. The bone itself is sound.
From the same individual as No. 4. in the Diseases of the Eye.
- 2 Tumor which was found in the posterior mediastinum, consisting throughout of cartilaginous substance.
- 3 A mass of indurated Cellular Tissue taken from the inside of the arm, with a portion of the Median Nerve from the same limb. The cellular tissue is converted into a solid and brawny substance nearly two inches in thickness. The integuments covering this mass are elevated into small tubercles. Two deep ulcers, with irregular and everted edges, are seen in the lower part of the mass. The median nerve exhibits the same change of structure as the cellular tissue, along two or three inches of its extent.
- 4 Sections of the Rectus Femoris Muscle, exhibiting depositions of medullary substance between its fibres; the intervening muscular structure is healthy.
From the same individual as No. 5.
- 5 Section of a Tumor taken from the axilla. In some parts it consists entirely of medullary substance, in others of medullary substance mixed with blood. A portion of the skin of the axilla is left attached to the tumor, in which there is a cicatrix marking the situation of an operation which had been performed for the removal of the diseased structure. To the lower part of the tumor the axillary artery, vein, and nerves, are attached.

- 6 Tumor of a firm fleshy structure, which formed in the cellular tissue, between the lower parts of the œsophagus and trachea. Ulceration of the œsophagus has taken place in one situation, apparently from the pressure of the tumor.
- 7 Tumor which projected from the mouth of a child at birth. It grew from the palate, from which it was separated by incision. The child recovered.
Presented by Dr. Conquest.
- 8 Portion of a Femur, exhibiting the growth of a tumor between the muscles upon its posterior surface.
- 9 Sections of the Tumor described in No. 8, shewing it to consist of a cartilaginous substance intermixed with specks of bone.
- 10 Encysted Tumors which formed beneath the scalp.
- 11 A large Mass of soft, fleshy, and very vascular Tumors, formed around the bones of the forearm and carpus. The bones themselves are sound.
- 12 Section of a large Tumor formed around the bones of the foot. It consists of a firm cartilaginous substance, intersected by white bands.
- 13 Two Cysts originating in the bursæ upon the patellæ of the same individual. The sides of each cyst are thick and tendinous, and from the internal surface, fleshy processes have arisen.
- 14 Section of an immense Tumor which occupied the whole arm and shoulder. The section consists of a slice taken out of the centre of the tumor. A portion of the shaft of the humerus is destroyed; the remaining part of the bone is imbedded in the tumor. In the lower part of the bottle is the scapula, the inferior angle of which projects through an ulcerated aperture in the skin, and is in a state of necrosis. The tumor itself is formed in part of a cartilaginous substance, and in part of a loose fibrous matter, intermixed with blood. In the cartilaginous part of the tumor deposits of bone have taken place. The head of the humerus is dislocated from the glenoid cavity, which is filled by the loose fibrous matter of the tumor.
Cast of the limb from which this preparation was taken, No. 5.
- 15 Clusters of enlarged absorbent Glands removed from the neck of a young subject. Bristles are passed beneath some of the branches of the cervical nerves which were removed with the glands.

Case described by Mr. Vincent. *Medico-Chirurgical Transactions*, vol. xii. p. 247.

- 16 Cyst which originated in the bursa upon the patella, with a portion of the skin covering it. The sides of the cyst are very thick. It was distended by a substance resembling honey.
- 17 Adipose Tumor removed from the thigh. In the centre of the tumor is a mass of bone.
- 18 Portion of the Upper Lip which was removed by operation. A section of the lip is made, shewing that its edge is converted into a white and hard substance.
- 19 The Cysts of two encysted Tumors which contained a soft white matter, partly of the consistence of honey, and partly disposed in flakes, resembling the scrapings of spermaceti. The sides of these cysts are dense and strong. They are both everted, in order to shew the internal surface, which is white and polished.
- 20 Section of a Tumor removed from the thigh. It consists of cells filled with blood, separated by a soft substance which, in some situations, is of a brown colour and fibrous texture, and in others, of a medullary nature. In the upper part of the tumor there are some cells distinct from the rest, and formed in the adipose structure of the limb. On the integuments covering the tumor, there is a small tubercular elevation at one part, and at another, an ulcerated opening.
- 21 Cyst which originated in the bursa upon the patella, with a portion of the skin covering it. The sides of the cyst are very thick. The contents were a fibrous matter, some of which is still adherent to the inside of the cyst.
- 22 Cyst removed by operation, which formed immediately beneath the skin covering the scapula. The cyst contained adipose matter in separate portions, some of which are still adherent to its internal surface.
- 23 Hydatids removed from a cyst in the liver.
- 24 A single Hydatid, removed from a cyst in the liver. Upon its surface there are numerous very small white bodies, which were considered to be young hydatids.
- 25 Hydatids, which were contained in a cyst between the muscles at the upper and inner part of the thigh.

THIRTIETH SERIES.

MORBID ALTERATIONS IN THE FŒTUS.

- 1 | Acephalous Fœtus, which was born with its skin stained in many situations with dark brown spots, which were supposed to be venereal.
| Presented by Dr. Conquest.
- 2 | Bladder, Ureters, and Kidneys of a Fœtus. The bladder is greatly dilated and thickened. The ureters are dilated, especially near their terminations. Throughout the interior of the kidneys, there are numerous small cysts which were filled by a transparent fluid.

THIRTY-FIRST SERIES.

URINARY CALCULI.

- | | |
|---|---|
| 1 | Calculus. Comp. Uric Acid.
From the bladder of a man, aged thirty-nine. Lithotomy performed by Mr. Earle. |
| 2 | Calculi. Comp. Uric Acid.
From the bladder of a man, aged sixty-four. Lithotomy performed by Mr. Earle. |
| 3 | Calculus. Comp. Uric Acid.
From the bladder of a boy, aged twelve. Lithotomy performed by Mr. Earle. |
| 4 | Calculus. Comp. Uric Acid.
From the bladder of a boy, aged four years and a half. Lithotomy performed by Mr. Vincent. |
| 5 | Calculus. Comp. Uric Acid.
From the bladder of a boy, aged twelve. Lithotomy performed by Mr. Vincent. |
| 6 | Calculus. Comp. Uric Acid.
From the bladder. Lithotomy performed by Mr. Lawrence. |
| 7 | Calculus. Comp. Uric Acid.
Extracted by Mr. Stanley, from a cyst communicating with the urethra near the bladder, in a boy, aged six. |
| 8 | Calculus. Comp. Compact Uric Acid.
From the bladder of a man, aged sixty-five. Lithotomy performed by Mr. Stanley.
The bladder and prostate gland of the individual from whom this calculus was removed are preserved; Diseases of the Prostate, No. 9. |

- | | |
|----|--|
| 9 | Calculus. Comp. Uric Acid.
From the urethra. Presented by A. S. Abbott, esq. |
| 10 | Calculus. Comp. Uric Acid. |
| 11 | Calculus. Comp. Uric Acid. |
| 12 | Calculus. Comp. Uric Acid. |
| 13 | Calculus. Comp. Uric Acid. |
| 14 | Calculus. Comp. Uric Acid. |
| 15 | Calculus. Comp. Uric Acid. |
| 16 | Calculus. Comp. Uric Acid. |
| 17 | Fifty-three Calculi. Comp. Uric Acid.
Taken from the bladder of a man after death. |
| 18 | Calculus. Comp. Externally Uric Acid, but probably consisting chiefly of Oxalate of Lime.
From the bladder of a man. Lithotomy performed by Mr. Lawrence. |
| 19 | Calculus. Comp. Oxalate of Lime.
From the bladder of a child, aged two years and a half. Lithotomy performed by Mr. Earle. |
| 20 | Calculus. Comp. Oxalate of Lime or Mulberry Calculus.
From the bladder of a young woman. Lithotomy performed by Mr. Earle. |
| 21 | Calculus. Comp. Oxalate of Lime or Mulberry Calculus.
Presented by H. Earle, esq. |
| 22 | Calculus. Comp. Oxalate of Lime.
From the bladder of a boy, aged seven. Lithotomy performed by Mr. Earle. |
| 23 | Calculus. Comp. Oxalate of Lime or Mulberry Calculus.
From the bladder of a boy, aged ten. Lithotomy performed by Mr. Vincent. |
| 24 | Calculus. Comp. Oxalate of Lime or Mulberry Calculus.
From the bladder of a boy, aged twelve. Lithotomy performed by Mr. Vincent. |

- 25 Calculus. Comp. Oxalate of Lime or Mulberry Calculus.
From the bladder. Lithotomy performed by Mr. Lawrence.
- 26 Calculi. Comp. Oxalate of Lime.
From the bladder of a boy. Lithotomy performed by Mr. Lawrence.
- 27 Calculus. Comp. Oxalate of Lime.
From the bladder of a boy, aged seven. Lithotomy performed by Mr. Stanley.
- 28 Calculus. Comp. Oxalate of Lime.
Extracted by Mr. Abbott, from the urethra.
- 29 Calculus. Comp. Oxalate of Lime or Mulberry Calculus.
From the bladder of a boy, aged eighteen. Lithotomy performed by Mr. Abbott.
- 30 Calculus. Comp. Oxalate of Lime.
From the urethra of a boy.
- 31 Calculus. Comp. Oxalate of Lime.
From the urethra of a boy, aged eight.
- 32 Calculus. Comp. Oxalate of Lime or Mulberry Calculus.
- 33 Portion of a Calculus. Comp. Oxalate of Lime.
Extracted from the urethra of a boy, by Mr. Vincent. In the bottle is a model of the stone when entire.
- 34 Calculus. Comp. Oxalate of Lime or Mulberry Calculus.
- 35 Calculus. Comp. Oxalate of Lime.
From the urethra of a female.
- 36 Calculus. Comp. Oxalate of Lime.
- 37 Calculus. Comp. Smooth Oxalate of Lime, commonly called the Hemp-Seed Calculus.
- 38 Calculus. Comp. Oxalate of Lime.

- 39 Calculus. Comp. Oxalate of Lime.
From the bladder of a boy, aged five. Lithotomy performed by Mr. Earle.
- 40 Calculus. Comp. External layer Fusible.
From the bladder of a boy, aged eight. Lithotomy performed by Mr. Earle.
- 41 Calculus. Comp. Phosphates, fusible.
From the bladder of a boy, aged four. Lithotomy performed by Mr. Earle.
- 42 Calculus. Comp. External Crust fusible, internally probably Oxalate of Lime, (not divided.)
From the bladder of a man, aged fifty-four. Lithotomy performed by Mr. Vincent.
- 43 Calculus. Comp. Phosphate of Lime, with a small portion of Phosphate of Magnesia and Ammonia, slightly fusible.
From the bladder of a man, aged thirty-seven. Lithotomy performed by Mr. Vincent.
- 44 Calculus. Comp. Fusible.
From the bladder of a man, aged forty. Lithotomy performed by Mr. Vincent.
- 45 Calculus. Comp. Triple Phosphate, with Phosphate of Lime deposited around a piece of the Stilet of a Catheter.
From the bladder of a man. Lithotomy performed by Mr. Lawrence.
- 46 Calculus. Comp. Fusible.
From the bladder. Lithotomy performed by Mr. Lawrence.
- 47 Calculus. Comp. Fusible.
Extracted by Mr. Stanley from a cyst which communicated with a fistulous passage leading from the bladder to the perineum.
- 48 Calculus. Comp. Fusible.
From the bladder of a boy, aged ten. Lithotomy performed by Mr. Abbott.
- 49 Calculi. Comp. Phosphate of Lime.
From the prostate gland.
- 50 Calculi. Comp. Fusible.
Taken from the bladder of a middle aged man, after death. Presented by T. Smith, esq.

- 51 Calculus. Comp. Phosphates, external layer fusible.
From the bladder of a boy, aged seventeen. Lithotomy performed by Mr. Earle.
- 52 Calculus. Comp. Oxalate of Lime, surrounded by the fusible calculus.
From the bladder of a man, aged twenty-seven. Lithotomy performed by Mr. Earle.
- 53 Calculus. Comp. Uric Acid upon a Nucleus of Oxalate of Lime.
From the bladder of a boy, aged nine. Presented by H. Earle, esq.
- 54 Calculus. Comp. Oxalate of Lime, Fusible externally.
From the bladder of a boy, aged nine. Lithotomy performed by Mr. Earle.
- 55 Calculus. Comp. External crust, Phosphates, slightly fusible; Nucleus, Uric Acid.
Presented by H. Earle, esq.
- 56 Calculus. Comp. Nucleus, Oxalate of Lime, externally, phosphates slightly fusible.
From the bladder of a child. Lithotomy performed by Mr. Earle.
- 57 Calculus. Comp. Uric Acid and Oxalate of Lime.
From the bladder of a boy, aged seven. Lithotomy performed by Mr. Earle.
- 58 Calculus. Comp. Oxalate of Lime, with a crust of the fusible calculus.
From the bladder of a boy, aged seventeen. Lithotomy performed by Mr. Vincent.
The bladder and kidneys of the individual from whom this calculus was removed, are preserved. Diseases of the Urinary Bladder, No. 23.
- 59 Calculus. Comp. Oxalate of Lime, with a crust of the fusible calculus.
From the bladder of a boy, aged ten. Lithotomy performed by Mr. Vincent.
- 60 Calculus. Comp. Oxalate of Lime, with a crust of the fusible calculus.
From the bladder of a boy, aged six. Lithotomy performed by Mr. Vincent.
- 61 Calculus. Comp. Oxalate of Lime, with a crust of the fusible calculus.
From the bladder of a boy, aged ten. Lithotomy performed by Mr. Vincent.
- 62 Calculus. Comp. Nucleus, Oxalate of Lime, with a deposition of the fusible calculus.
From the bladder of a boy, aged ten. Lithotomy performed by Mr. Vincent.

- 63 Calculus. Comp. Nucleus, Oxalate of Lime, External surface phosphates, fusible.
From the bladder of a boy, aged eight. Lithotomy performed by Mr. Vincent.
- 64 Calculus. Comp. Nucleus, Oxalate of Lime, with a crust of the fusible calculus.
From the bladder of a boy, aged sixteen years and a half. Lithotomy performed by Mr. Vincent.
- 65 Calculus. Comp. Phosphate of Lime and a small portion of Uric Acid, mixed.
From the bladder of a man, aged sixty. Lithotomy performed by Mr. Lawrence.
- 66 Calculus. Comp. Nucleus, Lithate of Ammonia: next, Oxalate of Lime and Phosphates.
From the bladder of a boy. Lithotomy performed by Mr. Lawrence.
- 67 Calculi. Comp. Central portion, Lithate of Ammonia, Oxalate of Lime and Phosphates, External part, Oxalate of Lime.
From the bladder. Lithotomy performed by Mr. Lawrence.
- 68 Calculus. Comp. Oxalate of Lime, surrounded by the fusible calculus.
From the bladder. Lithotomy performed by Mr. Lawrence.
- 69 Calculus. Comp. Oxalate of Lime, surrounded by the fusible calculus.
From the bladder of a female. Lithotomy performed by Mr. Stanley.
- 70 Calculi. Comp. Uric Acid, Urate of Ammonia.
From the bladder of a boy, aged eight. Lithotomy performed by Mr. Abbott.
The small stone was first removed, and the large one two years afterwards.
- 71 Calculus. Comp. Fusible, with a large portion of animal matter and a little uric acid.
From the bladder of a boy, aged twelve. Lithotomy performed by Mr. Abbott.
- 72 Calculus. Comp. Central portion, Lithate of Ammonia? Next layer, Oxalate of Lime. Third layer, looser in texture, fusible. Fourth or outermost layer, Lithate of Ammonia? with possibly a very small portion of Oxalate of Lime.
From the bladder of a man, aged thirty-six. Lithotomy performed by Mr. Abbott.
- 73 Calculus. Comp. Oxalate of Lime, with a Nucleus of Uric Acid, and covered externally by the fusible calculus.
From the bladder of a man, aged twenty-six. Lithotomy performed by Mr. Earle.

- 74 Calculus. Comp. Nucleus, Oxalate of Lime, and the external strata Uric Acid and Oxalate of Lime.
- 75 Calculi. Comp. Nucleus, Uric Acid, externally fusible.
From the bladder of a man.
- 76 Calculus. Comp. Central portion, Oxalate of Lime, externally, Phosphate of Lime, and Phosphate of Magnesia and Ammonia.
From the bladder.
- 77 Calculus. Comp. Uric Acid, and a very small portion of Oxalate of Lime.
- 78 Calculus. Comp. Uric Acid, with the Fusible Calculus.
- 79 Calculus. Comp. Oxalate of Lime, with a coat of the Fusible Calculus.
- 80 Calculus. Comp. Nucleus, Oxalate of Lime, external stratum, principally the Fusible Calculus.
- 81 Calculus. Comp. Nucleus, Oxalate of Lime, external part, principally the Fusible Calculus.
- 82 Calculus. Comp. Uric Acid, Urate of Ammonia.
From the bladder of a boy, aged nine. Lithotomy performed by Mr. Skey.
- 83 Calculi. Comp. Fusible, with a comparative larger proportion of Phosphate of Lime, and a small portion of Uric Acid.
From the bladder.
- 84 Calculus. Comp. Nucleus, Uric Acid, thin crust of the Nucleus, Oxalate of Lime, the outer white layer fusible.
From the bladder of a man, aged forty-two. Lithotomy performed by Mr. Lawrence.
- 85 Calculus. Comp. Oxalate of Lime internally, with an external stratum of Uric Acid.
Extracted by Mr. Earle, from the bladder of a female, by dilatation.
- 86 Calculus. Comp. Uric Acid upon a nucleus of Oxalate of Lime.
From the bladder of a boy, aged seven. Lithotomy performed by Mr. Earle.
- 87 Calculus. Comp. Nucleus, Oxalate of Lime, with the Phosphates externally.
From the bladder of a child, aged seven years and a half. Lithotomy performed by Mr. Earle.

- 88 Calculus. Comp. Internally, Oxalate of Lime, externally, the Phosphates.
From the bladder of a child aged four. Lithotomy performed by Mr. Earle.
- 89 Calculus. Comp. Nucleus, chiefly Lithate of Ammonia, with a little Oxalate of Lime and Phosphates; externally, Oxalate of Lime.
From the bladder. Lithotomy performed by Mr. Lawrence.
- 90 Calculus. Comp. Nucleus and central portion, Oxalate of Lime and Lithate of Ammonia, with a little of the Phosphates, then follows chiefly Oxalate of Lime; externally is a mixture of the Oxalate of Lime and Lithate of Ammonia, with some Phosphates.
From the bladder. Lithotomy performed by Mr. Lawrence.
- 91 Calculous Matter deposited around a piece of paper which had been passed into the urethra of a female. Comp. Fusible.
- 92 Calculi. Comp. Phosphate of Lime, with a large proportion of Animal Matter.
From the kidney.
- 93 Calculi. Comp. Phosphate of Lime, and a small portion of the Fusible Calculus.
From the kidney.
- 94 Calculus. Comp. Triple Phosphate.
From the kidney.
- 95 Calculus. Comp. Regularly crystallized Triple Phosphate upon probably a nucleus of Uric Acid.

BILIARY CALCULI.

- 1 Calculus from the gall bladder. Its fractured surface presents a crystallized appearance.
- 2 Calculi from the gall bladder. Comp. Cholesterine, the ashes containing a small quantity of Phosphate of Lime.
- 3 Calculus from the gall bladder.
- 4 Fifteen hundred Calculi from one gall bladder. Comp. Cholesterine.
- 5 Calculi from the gall bladder.
- 6 Calculus from the gall bladder.
- 7 Calculi from the gall bladder.
- 8 Numerous small Black Calculi from the gall bladder.
- 9 Calculi from the gall bladder.
- 10 Calculi from the gall bladder.
- 11 Calculi from the gall bladder. Comp. Cholesterine, with a small proportion of Phosphate of Lime.
- 12 Calculi from the gall bladder.
- 13 Calculi from the gall bladder. Comp. Cholesterine.
- 14 Biliary Calculi extracted from an abscess at the umbilicus.

CONCRETIONS FROM VARIOUS ORGANS.

- 1 Calculi from the pancreas.
 - 2 Calculi from the spleen.
 - 3 Calculus from a cyst in the liver.
 - 4 Earthy Matter coughed up from the trachea.
 - 5 Calculi from veins. Comp. Phosphate of Lime.
 - 6 Earthy Matter from the rectum.
 - 7 Part of a Gouty Concretion from the first joint of the great toe. Comp. Urate of Soda.
-

CALCULI FROM ANIMALS.

- 1 Calculus. Comp. Carbonate of Lime.
From the bladder of a horse. Presented by F. Salmon, esq.
- 2 Calculus. Comp. Phosphates, fusible, with much animal matter. Nucleus, a brass pin.
From the intestine of a horse.
- 3 Calculus, of a cubic form. Comp. Phosphates, fusible, with much animal matter.
From the intestine of a horse.

- | | |
|----|---|
| 4 | Calculus. Comp. Phosphates, fusible, with much animal matter. Nucleus, a piece of iron.
From the intestine of a horse. |
| 5 | Calculus. Comp. Phosphates, fusible, with much animal matter.
From the intestine of a horse. |
| 6 | Calculus. Comp. Phosphates, fusible, with much animal matter.
From the intestine of a horse. |
| 7 | Calculus. Comp. Phosphates, fusible, with much animal matter.
From the intestine of a horse. |
| 8 | Calculus. Comp. Phosphates, fusible, with much animal matter.
From the intestine of a horse. |
| 9 | Calculi. Comp. Internally, Phosphate of Lime; externally, Phosphate of Lime and the Triple Phosphate.
From the bladder of a dog. |
| 10 | Calculi from the hepatic duct of a horse. |
| 11 | Calculus from the bladder of a rat. |

CASTS OF CALCULI.

- | | |
|---|---|
| 1 | Cast of a Calculus spontaneously expelled from the bladder of a girl, aged fourteen, after repeated dilatations of the urethra with sponge tents.
Presented by George Witt, esq. |
| 2 | Cast of a Calculus which was removed from the bladder of a man. |
| 3 | Cast of a Calculus which was removed by operation from the bladder of a boy.
Presented by — Snaith, esq. |

- 4 Cast of a Calculus, extracted from the bladder of a man by Mr. Mayo. The calculus weighed fourteen ounces and two drachms.
Case described *Medico-Chirurgical Transactions*, Vol. xi., p. 54.
- 5 Cast of a Calculus removed entire from the bladder of a man by Mr. George Bell.
- 6 Cast of a Calculus which was extracted by dilatation from the bladder of a girl, aged seventeen, by Mr. Giraud.
- 7 Cast of a Calculus which passed from the bladder of a lady without any previous dilatation of the urethra.
Presented by F. F. Giraud, esq.
- 8 Cast of the Calculus; No. 84.
- 9 Casts of Calculi spontaneously expelled from the bladder of a female, aged fifty.

PART THIRD.

COMPARATIVE ANATOMY.

FIRST SERIES.

SKELETON. ORGANS OF MOTION.

MAMMALIA.

- | | |
|---|---|
| 1 | Skeleton of a Simia. |
| 2 | Skeleton of the Domestic Cat. Felis Catus. |
| 3 | Skeleton of a Beaver. Castor Fiber.
Presented by John Allan, esq. |
| 4 | Skeleton of a Mole. Talpa Europea.
Prepared by M. McWhinnie, esq. |
| 5 | Skull of an Asiatic Elephant. Elephas Indicus. |
| 6 | Skull of a Musk Ox. Bos Moschatus. |
| 7 | Skull of a Walrus. Trichechus Rosmarus.
Presented by Charles Beverly, esq. |

- 8 Sections of the Skull of a Horse. *Equus Caballus*.
- 9 Skull of a Mule. *Equus Asinus*.
- 10 Skull of a Leopard. *Felis Leopardus*.
- 11 Skull of a Tiger. *Felis Tigris*.
- 12 Skull of a Bear. *Ursus Arctos*.
- 13 Skull of a Wild Boar. *Sus Scrofa*.
- 14 Skull of a Porpoise. *Delphinus Phocæna*.
- 15 Skull of a Simia, with the cheek pouches. (*Simia Dentata*.)
- 16 Skull of a Simia [female.] (*Simia Sinica*.)
- 17 Skull of a Beaver.
- 18 Skull of a Badger. (*Ursus Meles*.)
Presented by M. Lievesley, esq.
- 19 Sections of the skull of a Badger, shewing the complicated spongy bones, bony tentorium, &c.
- 20 Skull of a Cat.
- 21 Section of the Skull of a Cat, shewing the bony tentorium.
- 22 Vertical Section of the Skull of a Cat.
- 23 Skull of a Rabbit. *Lepus Cuniculus*.
- 24 Skull of a Polecat. *Mustela Putorius*.
- 25 Skull of a Rat. *Mus decumanus*.
- 26 Skull of a Deer.
- 27 Skull of a Bull dog.

- 28 Skull of a Dog. Probably Mastiff.
- 29 Skull of a Greyhound.
- 30 Skull of a Terrier.
- 31 Skull of a Dog. Probably Spaniel.
- 32 Scapula of the Walrus.
Presented by Charles Beverly, esq.
- 33 Os Penis of the Walrus.
- 34 Sections of the Os Penis of the Walrus.
- 35 Pelvis of a Rabbit.
- 36 Skull of a young Pig. The bones have acquired the deep red colour in consequence of the animal having taken madder with its food for a considerable time.
- 37 The same, (dried.)
- 38 Tendons of the Foot of a Horse displayed.
- 39 Portion of Tendon, from the Horse. Its blood-vessels filled with quicksilver.
Presented by Thomas Wormald, esq.

AVES.

- 40 Skull of the Lesser Corvorant or Shag. *Pelecanus Graculus*.
- 41 Skeleton of a Falcon. *Falco Communis*.
- 42 Skeleton of a Parrot. *Psittacus* ——.
Presented by W. S. Ward, esq.
- 43 Skull of the Wild Swan. *Anas Cygnus*.
- 44 Sternum, with the Trachea of the Wild Swan.

- 45 Pelvis of the Wild Swan.
- 46 Sections of the thigh bone of an Ostrich. Struthio —.
- 47 Sections of the Skull of the Wood Owl. Strix Aluco.
- 48 Sections of the cervical portion of the spine of the Wild Swan.

PISCES.

- 49 Skeleton of a Cod. Gadus Morrhuca.
Presented by P. W. Jacob, esq.
- 50 Skeleton of the Coryphæna Hippuris. A species of Dorado.
Presented by E. Dew, esq.
- 51 Jaw bones of a Shark. Squalus Carcharias. Four specimens.
- 52 Jaw bones of a Skate. Raia Batis.
- 53 Sections of the vertebral column of a Shark.

REPTILIA.

- 54 Skull of a Turtle. Testudo Mydas.
- 55 Pelvis of a Turtle.
Presented by W. J. Bayntin, esq.
- 56 Skeleton of a Frog. Rana Temporaria.
Presented by W. J. Bayntin, esq.
- 57 Skeleton of the Boa Constrictor.
Presented by F. and A. Farre, esqrs.

SECOND SERIES.

ORGANS OF MASTICATION, DEGLUTITION, &c.

- | | |
|----|--|
| 1 | Sections of the Head of a Rat, displaying the Incisor Teeth. |
| 2 | Sections of the Lower Jaw of a Beaver, displaying the Incisor Teeth. |
| 3 | Sections of the Teeth of a Horse, which have been burnt for the purpose of shewing the arrangement of the bone and enamel. |
| 4 | Lower Jaw of the Fœtal Calf, shewing the capsules of the teeth. |
| 5 | Teeth removed from the jaw of the Fœtal Calf. The capsules have been opened for the purpose of shewing the bony shells around the pulps. |
| 6 | Œsophagus of the Turtle, everted. |
| 7 | Pharynx, palate, &c. of the Calf. Absence of the uvula. |
| 8 | Tongue, Pharynx, &c. of the Ostrich. |
| 9 | Tongue, Glottis, &c. of the Turtle. |
| 10 | Tongue, Glottis, and Pharynx of the Tortoise. |
| 11 | Palatine glands of the Ostrich. |

THIRD SERIES.

DIGESTIVE ORGANS, KIDNEYS, &c.

- | | |
|----|--|
| 1 | Stomach of the Ostrich, displaying the Gastric Glands. |
| 2 | Stomach, with the Crop and Œsophagus of the Kite. |
| 3 | Stomach of the Rat. |
| 4 | Stomach of the Lobster. |
| 5 | Intestine of the Turtle, shewing the termination of the Ductus Choledochus. |
| 6 | Intestine of the Dog. Mucous glands displayed. |
| 7 | Intestine of the Turtle, shewing the peculiar form of the Valvulæ Conniventes. |
| 8 | The same. |
| 9 | The same. |
| 10 | Large Intestine of the Turtle. |
| 11 | Intestine of the Turtle. Its muscular coat exposed. |
| 12 | Small Intestine of the Ostrich. Villi injected. |

- 13 Small Intestine of the Dog. Villi loaded with Chyle.
- 14 Cæcum of the Rat.
- 15 Small Intestine of the Dog. Villi injected.
- 16 Spleen of the Calf. Its cells shewn.
- 17 Kidney of the Turtle.
- 18 Kidney of the Bear.
- 19 Kidney of the Cat. Its veins injected.
- 20 Intestine and Appendices Pyloricæ of the Salmon, distended with wax.
- 21 Stomach of the Tiger.
- 22 Intestine of the Skate. Its spiral valve shewn.
- 23 Cloaca of the Ostrich. Termination of the ureters, with the oviduct shewn.
- 24 Cæcum of the Tiger.
- 25 Œsophagus and Stomach of the Turtle.
- 26 Stomach of the Tortoise.

FOURTH SERIES.

ORGANS OF CIRCULATION AND RESPIRATION.

- | | |
|----|---|
| 1 | Heart of the Ostrich. Muscular valve in the right ventricle shewn. |
| 2 | Cerebral Arteries in the Calf, (Plexus Mirabilis.) |
| 3 | Arteries and Veins in the foot of the Horse, injected. |
| 4 | Foot of the Horse, minutely injected. |
| 5 | Heart of the Turtle, injected. |
| 6 | Sections of the Spermatic Artery of the Bull, which has been filled with quicksilver. |
| 7 | Spermatic Artery of the Bull, injected. |
| 8 | Section of the Lung of the Ostrich. |
| 9 | Section of the Lung of the Turtle. |
| 10 | The same. |
| 11 | Gills of a Fish, injected. |
| 12 | Lungs of the Frog. |

- | | |
|----|--|
| 13 | Portion of the Lung of the Boa Constrictor.
Presented by F. Farre, esq. |
| 14 | Gills of the Oyster displayed. |
| 15 | Trachea, with its muscles, from the Ostrich. |
| 16 | Arch of the Aorta, with its branches, from the Tiger. |

FIFTH SERIES.

ABSORBENT VESSELS.

- | | |
|---|--|
| 1 | Absorbent Vessels from the leg of the Horse, filled with quicksilver. |
| 2 | The same. |
| 3 | Absorbent Vessels in the intestine of the Turtle, filled with quicksilver. |
| 4 | Absorbent Vessels in the intestine and mesentery of the Turtle, filled with quicksilver. |
| 5 | The same. |
| 6 | Absorbent Vessels and Glands in the Mesentery, filled with quicksilver. Animal unknown. |

SIXTH SERIES.

ORGANS OF SENSE.

EYE, &c.

- 1 Section of the Eye of the Cat, shewing the peculiar colour of the tapetum.
- 2 Eye of the Horse. Venæ vorticosæ filled with quicksilver.
- 3 Portion of the Choroid Membrane, from the Horse. Venæ vorticosæ filled with quicksilver.
- 4 Eye of the Dog. Arteries of the choroid membrane filled with quicksilver. -
- 5 Membrane of the Aqueous Humor, from the Hare.
- 6 Ciliary Processes and Iris, from the Ostrich.
- 7 Integuments of the head of a Snake, with which a transparent membrane is detached from the front of each eye.
- 8 Membrana Nictitans, with its muscles and tendon, in the Brown Owl. *Strix Stridula*.
Presented by R. Partridge, esq.
- 9 Portion of the Eye of the Ostrich. Marsupium displayed.
- 10 Section of the Eye of the Ostrich, shewing the situation and connexions of the marsupium.
- 11 Crystalline Humor of the foetal Calf. Vascularity of its capsule shewn.

- 12 Eyelids of the Horse. Bristles are passed into the lacrymal ducts.
- 13 Eyelids and Lacrymal Organs, from the Stag.
- 14 Eyelids with the Puncta lacrymalia, ducts continued from these, the nasal duct, &c. From the Ass.
- 15 Cornea, with the circle of bone around it, from the Turkey.
- 16 Crystalline Humor of the Sheep, split into fibres.
- 17 Crystalline Humor of the Sheep. Its layers shewn. Four specimens.

EAR.

- 1 Ear of the Turtle. Its ossiculum displayed.
- 2 Ear of the Seal. Membrana tympani and ossicula shewn.
- 3 Ear of the Walrus. Membrana tympani and ossicula shewn.
- 4 Membrana Tympani, with the ossiculum, from the Ostrich.
- 5 Ossiculum Auditûs, from the Ostrich.
- 6 Semicircular canals of the Skate, filled with quicksilver.
- 7 External part of the Ear of the Ostrich.

NOSE.

- 1 Nose of the Turtle. Olfactory nerve displayed.

SKIN.

- 1 Portion of Skin, with the Whisker, from the Tiger. Filaments of the superior maxillary nerve are traced to the bulbs of the hairs.

SEVENTH SERIES.

ORGANS OF GENERATION.

- 1 | Penis and Testes of the Dog. Communication of the tunica vaginalis with the abdomen displayed.
- 2 | Genital Organs, with the bladder, kidneys, &c. of the Hedgehog. Vasa deferentia and ducts of the vesiculæ seminales shewn, proceeding separately to the urethra.
- 3 | Ovarium of the common Fowl. The yolks of several eggs are seen enclosed in their calyces. One egg has reached the lower part of the oviduct, and has received its shell.
- 4 | View of the Oviducts, Cloaca, &c. of the Turtle.
- 5 | Testes, with the Spermatic Cords of the Mule. The testes are very small, irregularly shaped, and with scarcely any vestige of the natural structure. The vasa deferentia, and epididymes are pervious. Quicksilver has passed from one of the vasa deferentia into a considerable portion of the epididymis.
- 6 | Bladder with the Genital Organs of the Mule. The vesiculæ seminales, vasa deferentia, prostate gland, and Cowper's glands, are displayed. Bristles are passed into the prostatic ducts.

- 7 Uterus, with its appendages, from the Mule. Bristles are passed from the uterus into the Fallopian tubes.
- 8 Placenta, with the membranes, allantois, and foetus; from the Cat.
- 9 Placenta, Membranes, and Foetus; from the Cat.
Presented by Dr. Conquest.
- 10 Placenta of the Cat.
Presented by Dr. Conquest.
- 11 Uterus, with its appendages, from the Sheep.
Presented by Dr. Conquest.
- 12 Uterus of the Mouse, impregnated.
Presented by Dr. Conquest.
- 13 Portion of the Uterus, from the impregnated Sow.
Presented by Dr. Conquest.
- 14 Pelvis of the Guinea Pig, at the time of parturition, shewing the separation of its sides at the symphysis pubis.
Presented by Dr. Conquest.
- 15 Series of Pelves of the Guinea Pig, with the Skull of the Foetal Animal, shewing the changes in the pelvis, connected with parturition.
Presented by S. Birch, esq.
- 16 Ovaries of the Sow.
Presented by Dr. Conquest.
- 17 Internal Genital Organs of the Free-Martin, consisting of the vesiculæ seminales, and vasa deferentia, the uterus and its appendages.
Presented by Dr. Conquest.
- 18 Ovary, with a portion of the Uterus, from the Sow.
Presented by Dr. Conquest.
- 19 Portion of the impregnated Uterus of a Sheep.
Presented by Dr. Conquest.

- | | |
|----|--|
| 20 | Portion of the impregnated Uterus of a Cow.
Presented by Dr. Conquest. |
| 21 | Penis of a Dog. Two specimens. One injected with wax. In the other, a portion of the corpus spongiosum has been removed. |

EIGHTH SERIES.

PECULIAR SECRETORY ORGANS.

- | | |
|---|-----------------------------------|
| 1 | Sacs near the Anus in the Badger. |
| 2 | Anal Pouches in the Cat. |

NINTH SERIES.

ALTERATIONS OF STRUCTURE, MORBID PRODUCTS, HYDATIDS, MALFORMATIONS, &c. IN ANIMALS.

- 1 Portions of Lung and Liver, from the Horse. The natural structure of each organ is almost completely removed, and its place is occupied by a white and hard substance, consisting of animal matter united to a small proportion of carbonate and phosphate of Lime.
Presented by William Sewel, esq.
- 2 Portions of Muscle and Liver, from the Pig. Throughout each organ, there are cells containing vesicular bodies, considered to be hydatids.
- 3 Portion of the Left Ventricle of a Calf, from the apex of which, a tumor of a soft medullary texture has arisen.
- 4 Portion of Brain, with the Optic Nerves, from the Horse. Blindness had existed for a long time in one eye. The nerve of the diseased eye is considerably diminished to its junction with the opposite nerve. Beyond the junction, the opposite nerve is diminished.
- 5 Portions of Liver and Lung, from the Sheep, exhibiting numerous hydatids in the substance of each organ.
- 6 Eye of an Ox, exhibiting the growth of an adipose tumor covered with skin and hair, from the external surface of the cornea.
- 7 Portion of the Upper Jaw of a Sheep, from the alveolar process of which, a bony cyst is continued. A Tooth is attached to the inside of this cyst.

- 8 Section of the Tongue of a Cow, from the surface of which, a large fungous excrescence has arisen.
- 9 Portion of the Liver of a Cow, exhibiting numerous hydatids in its substance.
- 10 Portion of the Lung of a Calf, exhibiting numerous hydatids in its substance.
- 11 Brain, with the Skull-Cap of a giddy Sheep. There is a large cavity in one of the hemispheres of the cerebrum, in which the hydatid (*Cœnurus Cerebralis*) was found, which is seen at the bottom of the bottle. Absorption of the skull-cap has taken place to a considerable extent, and in several situations.
- Presented by Robert Wyatt, esq.
- 12 Hydatid (*Cœnurus Cerebralis*) removed from the brain of a giddy Sheep. Minute white bodies are attached to its surface, which are considered to be young hydatids.
- 13 Radius and Ulna of a Dog. From the external surface of each bone, there is an extensive growth of osseous substance in a fungous form. Most of the other bones of the animal were similarly affected.
- Presented by W. S. Ward, esq.
- 14 Heart of a Lamb, consisting of two auricles, and four ventricles. There are two aortæ which are joined, soon after their origins; and two pulmonary arteries, from each of which, a ductus arteriosus is continued. Each auricle communicates with two ventricles. From two of the ventricles, an aorta and a pulmonary artery arise. From the two other ventricles, two arteries arise, which are continued into the aortæ.
- 15 Head of a Pig, malformed. The eyes are situated close together, and in one cavity in the middle of the face. A conical fleshy excrescence, about two inches in length, is continued from the face immediately above the eyes.
- 16 Humerus of a Horse, which has been fractured. The fracture is firmly united.
- 17 Bones of the Fore Leg of a Horse, from which numerous exostoses have arisen.

PART FOUR.

NATURAL HISTORY.

- 1 Foetal Shark. *Squalus Tiburo*.
- 2 Scorpion. *Scorpio Occitanus*.
Presented by E. Webb, esq.
- 3 Young Opossum. *Didelphis Marsupialis*.
Presented by A. Farre, esq.

PARASITIC ANIMALS. ENTOMOZOA.

- 1 Portion of the Stomach of a Horse, with numerous larvæ or botts (*Æstrus equi*) attached to its internal surface.
- 2 Guinea Worm. (*Filaria Medinensis*.) From the subcutaneous cellular tissue of the leg.
- 3 Worms. (*Spiroptera hominis*.) From the human bladder.
Case described by Mr. Lawrence, *Medico-Chirurgical Transactions*, Vol. 2.
- 4 *Tænia Solium*. Habitat—The small intestines of man.
- 5 *Ascaris Lumbricoides*. Dissected to exhibit the convolutions of the oviducts. Habitat—The small intestines of man, also the intestines of the genera *sus*, *bos*, *equus*, *asinus*.
- 6 *Ascaris Lumbricoides*. The oviducts are removed from the body. Bristles are passed beneath the intestine.
- 7 *Tænia serrata*. Habitat—Small intestines of the Dog.
- 8 Lobster, shewing the reproduction of one of the claws, and of one of the legs.

- | | |
|----|--|
| 9 | Tail of a Lizard (Scincus,) shewing the production of a new Tail. |
| 10 | Nutmeg plant.
Presented by G. Langstaff, esq. |
| 11 | Section of an Orange, which contains a smaller one in its interior. |
| 12 | Stramonium plant, dissected.
Presented by J. E. Wilson, esq. |
| 13 | Hyoscyamus Plant, dissected.
Presented by J. E. Wilson, esq. |
| 14 | Liber of the Daphne Lagetto, or Lace Bark of Jamaica.
Presented by T. G. Norris, esq. |

Hydatids from the Human Subject described in the Twenty-ninth Series of
Pathological Preparations.

Hydatids in Animals described with the Alterations of Structure, Morbid
Products, &c., Ninth Series Comparative Anatomy.

MODELS AND CASTS RELATING TO NATURAL STRUCTURE.

- | | |
|-------|---|
| A. 1 | Model in wax, of the internal part of the Organ of Hearing, representing the Cochlea, Semicircular Canals and Vestibule. |
| A. 2 | Model in wax, representing a different view of the same parts, with the Meatus Auditorius Internus. |
| A. 3 | Model in wax. Representation of the same parts laid open. |
| A. 4 | Model in wax. Representation of the interior of the Cochlea, Vestibule, and Semicircular Canals, and of the membranous sacs and tubes filling them. |
| A. 5 | Model in wax, representing the same parts in a different view, with the Meatus Auditorius Internus, Facial and Auditory Nerves. |
| A. 6 | Model in clay, representing the Cochlea, Semicircular Canals, and Vestibule. |
| A. 7 | Model in clay, representing the interior of the Vestibule and Semicircular Canals. |
| A. 8 | Model in wax, representing all the parts of the Ear. |
| A. 9 | Model in wax, representing the Membrana Tympani, Ossicula Auditūs, and their muscles. |
| A. 10 | Model in wax, representing the Basis of the Brain, with the Origins of the Nerves. |
| A. 11 | Model in wax, representing the Internal parts of the Brain.
From a dissection prepared by Reil. |
| A. 12 | Model in wax, representing the External and Internal parts of the Brain.
From a dissection prepared by Reil. |
| A. 13 | Model in wax, representing the Internal parts of the Brain.
From a dissection prepared by Reil. |

- A. 14 Model of the internal parts of the Eye, as they are presented in a vertical section of the organ.
Prepared by W. H. Clift, esq.
- A. 15 Bust of an African.
- A. 16 Model in Wax, representing the parts in the Foot of the Horse exposed by the removal of the hoof.
- A. 17 Model in Wax, representing the Bones, Muscles, and Tendons, as they are seen in a vertical section of the Fore Leg of a Horse.

MODELS AND CASTS RELATING TO MORBID STRUCTURE, MALFORMATIONS.

- 1 Cast of the Lower Limb. Large Tumor surrounding the Thigh.
See Diseases of Bone, No. 22.
- 2 Cast of the Lower Limb. Large Tumor surrounding the Thigh and Knee-joint.
See Diseases of Bone, No. 26 and 27.
- 3 Cast of the Thigh and part of the Pelvis. Large Tumor surrounding the upper part of the Thigh.
See Diseases of Bone, E 10.
- 4 Cast of an Inguinal Hernia in the Female.
See Displacements of Intestine, Herniæ, &c. No. 24.
- 5 Cast of the Upper Limb, and part of the Chest. Large Tumor surrounding the Shoulder.
See Various Morbid Products, Tumors, &c. No. 14.
- 6 Cast of a Hernia, which protruded through the inferior aperture of the pelvis into the labium.

- 7 Cast of a Femoral Hernia, in the male.
- 8 Cast of a Femoral Hernia, in the male.
Presented by G. Macilwain, esq.
- 9 Cast of an Inguinal Hernia, in the female.
Presented by G. Macilwain, esq.
- 10 Cast of two Inguinal Herniæ, in the female. One hernia is situated at the inguinal ring.
The other has descended into the labium.
- 11 Cast of a large Inguinal Hernia, in the male.
Presented by G. Macilwain, esq.
- 12 Cast of a Femoral Hernia, in the female.
- 13 Cast of two Femoral Herniæ, in the male.
Presented by G. Macilwain, esq.
- 14 Cast of a large Femoral Hernia, in the female.
Presented by G. Macilwain, esq.
- 15 Cast of a Tumor in the Thigh, produced by an abscess originating in the loins, and which was
mistaken for a femoral hernia.
From the same individual as the diseased spine, Diseases of Joints, No. 45.
- 16 Cast of an Inguinal Hernia, in a young female.
Presented by G. Macilwain, esq.
- 17 Cast of an Inguinal Hernia, in the male.
- 18 Cast of a Femoral Hernia, in the male.
Presented by G. Macilwain, esq.
- 19 Cast of an Inguinal Hernia, in the female. Part of the tumor was within the inguinal canal,
and the other part within the labium.
Presented by G. Macilwain, esq.

- 20 Cast of an Inguinal Hernia, in a young male.
Presented by G. Macilwain, esq.
- 21 Cast of a Tumor in the Groin, which subsided on the discharge of a large quantity of matter from an ulcerated opening in the skin covering it. On the same side as the tumor, the testicle had not passed into the scrotum.
- 22 Cast of a Tumor in the Groin, which was found to consist of medullary substance. The testicle had not, on either side, passed into the scrotum.
Presented by John Lawrence, esq.
- 23 Cast of the Abdomen of an individual in whom there was a deficiency of the anterior part of the urinary bladder, of the abdominal muscles and integuments.
- 24 Cast of an Aneurism, arising from the arch of the aorta, and extending through the sternum and ribs.
Presented by D. Fox, esq.
- 25 Cast of a Tumor in the Face, produced by disease originating in the antrum.
- 26 Cast of a Hydrocele, in which the tunica vaginalis yielded unequally.
Presented by G. Macilwain, esq.
- 27 Cast of a Leg, in which there had been a dislocation of the lower end of the tibia forwards, with fracture of the fibula, a short distance above the ankle
- 28 Cast of an Abscess, presenting at the inner part of the thigh, which originated in the loin.
- 29 Cast of the posterior part of the Trunk, shewing an irregularity in the spinous processes of the lumbar vertebræ, the consequence of fracture.
- 30 Cast of the posterior part of the Trunk, shewing an irregularity in the spinous processes of the lumbar vertebræ, the consequence of fracture.
- 31 Casts of the Hands of an individual who had been affected with gout. The tumors upon the fingers were produced by chalkstones.
Presented by Owen Evans, esq.
- 32 Cast of a Tumor, at the upper and outer part of the Thigh, produced by an abscess which originated in the loin.

- 33 Cast of a Tumor in the Neck, produced by an aneurism which originated in the lower part of the trunk of the carotid artery.
- 34 Cast of a Tumor in the Back, produced by an abscess which formed by the side of the lower dorsal vertebræ.
Presented by R. A. Stafford, esq.
- 35 Cast of an Ankle Joint, in which there is a dislocation of the tibia forwards upon the tarsus.
- 36 Cast of the External Genital Organs of an imperfectly formed male. The scrotum is divided into two distinct portions, each of which contained a testicle. The urethra is imperfect; its external orifice is in the perineum.
Presented by G. Macilwain, esq.
- 37 Cast of the Hand of an adult Male, in which, from original formation, the ring and little fingers with their metacarpal bones are wanting. The fore and middle fingers are united in their whole length.
- 38 Cast of the part of a Foot which remained after the removal of nearly the whole of the tarsus and metatarsus, in consequence of injury.
Presented by C. A. Key, esq.
- 39 Cast of the Face of a Woman, from whose forehead a portion of skin had been detached in the formation of a new nose. The operation was performed by Mr. Vincent.
- 40 Cast of an Elbow, in which there is a dislocation of the Radius and Ulna upwards and backwards.
- 41 Cast of a Pelvis, deformed in consequence of Rickets.
- 42 Cast of a Pelvis, deformed in consequence of Rickets.
- 43 Cast of a Pelvis, deformed in consequence of Rickets.
- 44 Cast of a Tumor, at the back part of the Skull. It originated in the dura mater, and it consisted of medullary substance.
Presented by Joseph Hodgson, esq.
- 45 Cast of a Lower Limb affected with Elephantiasis.

46 Model in wax, representing the Stomach with part of the Duodenum of an individual poisoned by sulphuric acid.

47 Model of a Tumor, situated upon the lower part of the Neck, Shoulder, and Chest. It consisted of medullary substance.

48 Model of an Osteosarcomatous Tumor, which originated in the lower jaw.

The diseased parts are preserved in the Museum of the Royal College of Surgeons.

49 Model, representing a large and foul Ulcer between the lower jaw and the ear.

From an individual who had been a chimney-sweeper.

50 Model of the External Genital Organs of an individual, twenty-two years of age. The testicles, contained in separate bags of skin, with the spermatic cords, were distinctly recognised. The urethra terminates by a large orifice in the perineum. The penis is very small.

The individual from whom this model was taken wore the dress of a female.

51 Cast of the Face of the individual from whom the preceding model was taken.

52 Model of a Chinese to whose body another male child is attached.

Extract from the account of this case. *Edinburgh Philosophical Journal*, vol. v. and vol. vii.

“A-ke was born sixteen years ago, with another male child of nearly the same size united to the pit of his stomach by the neck, as if his brother had plunged its head into his breast. The skin of the principal here joins that of the upper part of the neck of the parasite quite regularly and smoothly, excepting the superficial blood-vessels, which appear somewhat turgid. The sufferings of the mother were so great, that she survived the birth of this monster only two days. Since that time, the parasite has not much increased in size, and at present, is not much larger than new born infants usually are; but the bones are completely formed.”

Presented by H. Earle, esq.

53 Models in Plaster, representing the gravid uterus, its vessels, &c.

Presented by Dr. Conquest.

54 Model in Plaster, representing the escape of the Fœtus into the Abdomen, in consequence of a rupture of the uterus.

Presented by Dr. Conquest.

SERIES OF CASTS OF THE FOOT OF THE HORSE, SHEWING THE CHANGES
IN ITS FORM CONSEQUENT ON SHOEING.

- | | |
|----|---|
| 55 | From a Horse, seven years old, which had never been shod. |
| 56 | From a Horse, four years old which had been shod only three months. |
| 57 | From a Horse, twelve years old, which had been shod nine years. |
| 58 | From a Horse, fourteen years old, which had been shod many years. |
-

MISCELLANEOUS.

- | | |
|---|--|
| 1 | Natural Mummy of a Child, buried in the year 1777. |
| 2 | Portions of Animal Matter, converted into adipocire. |
| 3 | Natural Mummy of a Cat which was starved to death. |
| 4 | The same. |
| 5 | Section of a Ball of Hair found in the Stomach of a Cow. |

C. ADLARD, PRINTER, BARTHOLOMEW CLOSE.

